
REPORT OF PHASE I ENVIRONMENTAL SITE ASSESSMENT

**BALDWIN HARDWARE MANUFACTURING CORPORATION
841 EAST WYOMISSING BOULEVARD
READING, PENNSYLVANIA**

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Table-Of-Contents

	Page
EXECUTIVE SUMMARY	ES-1
1. INTRODUCTION	1-1
1.1 Purpose	1-1
1.2 Scope of Services	1-2
1.3 Non-Scope Considerations	1-3
1.4 Exceptions and Deviations	1-3
1.5 Limitations	1-4
2. SITE DESCRIPTION	2-1
2.1 Site Location	2-1
2.2 Site Vicinity	2-1
2.3 Site Characteristics	2-1
2.3.1 Central Unit	2-2
2.3.2 Lower Unit	2-2
2.3.3 Administration Unit	2-3
2.3.4 Utilities	2-3
2.3.5 Groundwater Remediation System and Monitoring Well Network	2-3
2.4 Physical Setting	2-4
2.4.1 Overview	2-4
2.4.2 Physiographic Setting	2-4
2.4.3 Topographic Setting	2-4
2.4.4 Surface and Subsurface Soils	2-4
2.4.5 Bedrock	2-5
2.4.6 Groundwater	2-5
2.4.7 Surface Water	2-6
3. HISTORY	3-1
3.1 Present Use	3-1
3.2 Former Use	3-1
4. RECORDS REVIEW	4-1
4.1 Introduction	4-1
4.2 Previous Reports, Plans and Other Documents	4-1
4.3 DEP File Review	4-3
4.4 Local File Review and Interviews	4-3



4.5	EPA-Maintained Files	4-4
4.6	Literature Review	4-4
4.7	Environmental Data Resources, Inc. Report	4-4
4.7.1	Environmental Records	4-5
4.7.2	Physical Setting Source Records	4-9
5.	SITE RECONNAISSANCE AND KEY PERSONNEL INTERVIEWS	5-1
5.1	Introduction	5-1
5.2	General Conditions	5-1
5.3	Manufacturing Processes	5-2
5.4	Material and Chemical Storage Areas	5-3
5.5	Underground Storage Tanks	5-3
5.6	Aboveground Storage Tanks	5-5
5.7	Boiler Room	5-6
5.8	Waste Streams	5-6
5.9	Waste Handling, Storage, and Treatment	5-7
5.9.1	Waste Handling, Storage, and Treatment Areas	5-7
5.9.2	Wastewater Treatment Plant	5-8
5.9.3	Former Drying Beds	5-9
5.10	Polychlorinated Biphenyls	5-10
5.11	Asbestos-Containing Material	5-10
5.12	Groundwater Remediation System	5-11
5.12.1	Background	5-11
5.12.2	System Design	5-12
5.12.3	System Performance	5-13
5.13	Additional Recognized Environmental Conditions	5-14
5.14	Additional Information	5-15
6.	PERMITS AND AUTHORIZATIONS	6-1
6.1	Overview	6-1
6.2	Hazardous Waste Activity Permit-By-Rule Status	6-1
6.3	Air Permit	6-1
6.4	NPDES Permit	6-2
6.5	Delaware River Basin Commission Approval	6-3
7.	COMPLIANCE	7-1
7.1	Overview	7-1
7.2	Administrative Orders on Consent	7-1
7.2.1	Waste Management	7-1
7.2.2	Groundwater Contamination	7-1
8.	SUMMARY	8-1



TABLES

Table 1	Building Identification
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FIGURES

Figure 1	Site Location
Figure 2	Site Parcel

DRAWINGS

Drawing 1	Site Plan
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APPENDICES

A	Summary of Limited Phase 1 Activities Performed at Baldwin's Assembly and Distribution Facility
B	Environmental Data Resources, Inc. Report
C	Aerial Photographs
D	Historic Topographic Maps
E	Photodocumentation

LIST OF ACRONYMS

ACM	Asbestos-Containing Material
AIRS	Aerometric Information Retrieval System
AOC	Administrative Order on Consent
AST	Aboveground Storage Tank
ASTM	American Society for Testing and Materials
BGS	Below Ground Surface
BRS	Biennial Reporting System
CERC-NFRAP	CERCLIS-No Further Remedial Action Planned
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
CONSENT	Superfund (CERCLA) Consent Decrees
CORRACTS	Corrective Action Reports



CRA	Conestoga-Rovers & Associates
DCE	Dichloroethylene
DEP	Pennsylvania Department of Environmental Protection
DOD	Department of Defense Sites
DRBC	Delaware River Basin Commission
DNAPL	Dense Non-Aqueous Phase Liquid
EI	Environmental Indicators
ECHO	Enforcement & Compliance History Online
EDR	Environmental Data Resources, Inc.
EOG	Environmental Options Group, Inc.
EP	Extraction Procedure
EPA	Environmental Protection Agency
ERM	Environmental Resources Management, Inc.
ERNS	Emergency Response Notification System
FEMA	Federal Emergency Management Agency
FFIS	Federal Facilities Information System
FIFRA	Federal Insecticide, Fungicide, & Rodenticide Act
FINDS	Facility Index System
FIRM	Flood Insurance Rate Map
FOIA	Freedom of Information Act
FTTS	FIFRA/TSCA Tracking System
FURS	Federal Underground Injection Control System
HMIRS	Hazardous Materials Information reporting System
HREC	Historical Recognized Environmental Condition
LAST	Leaking Aboveground Storage Tank
LEA	Loureiro Engineering Associates, Inc.
LEPC	Local Environmental Planning Commission
LQG	Large Quantity Generator
LUST	Leaking Underground Storage Tank
MCLs	Maximum Contaminant Levels
MGP	Manufactured Gas Plant
MINES	Mines Master Index File
MLTS	Material Licensing tracking System
NGVD	National Geodetic Vertical Datum
NOV	Notice of Violation
NPDES	National Pollutant Discharge Elimination System



NPL	National Priority List
OSHA	Occupational Safety and Health Administration
PADS	PCB Activity Data System
PCBs	Polychlorinated Biphenyls
PCE	Perchloroethylene (tetrachloroethylene)
PCS	Permit Compliance System
PPC	Pollution Prevention and Contingency Plan
POTW	Publicly-Owned Treatment Works
PVD	Physical Vapor Deposition
RAATS	RCRA Administrative Action Tracking System
RCRA	Resource Conservation and Recovery Act
RCRIS	Resource Conservation and Recovery Information System
REC	Recognized Environmental Condition
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
ROD	Records of Decision
SARA	Superfund Amendments and Reauthorization Act
SCS	Soil Conservation Service
SQG	Small Quantity Generator
SHW	Hazardous Sites Cleanup Act Site List
SSTS	Section Seven Tracking Systems (Section Seven of FIFRA)
SWF/LF	Solid Waste Facilities/Landfill Sites
TCA	1,1,1-Trichloroethane
TCE	Trichloroethylene
TDS	Total Dissolved Solids
TRI	Toxic Chemical Release Inventory
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
TSD	Treatment Storage and Disposal Facility
USDA	United States Department of Agriculture
USGS	United States Geological Survey
UST	Underground Storage Tank
VCP	Voluntary Cleanup Program
VOCs	Volatile Organic Compounds
WWF/MF	Warm Water Fisheries/Migratory Fisheries
WWTP	Waste Water Treatment Plant



LIST OF UNITS

cfm	cubic feet per minute
cy	cubic yards
gpm	gallons per minute
ppb	parts per billion



EXECUTIVE SUMMARY

Loureiro Engineering Associates, Inc. (LEA) has performed a Phase I Environmental Site Assessment of Masco Corporation's Baldwin Hardware Manufacturing Corporation. The Baldwin facility is located at 841 East Wyomissing Boulevard in Reading, Pennsylvania (Site). The findings of the Phase I assessment are the subject of this report. A limited assessment of Baldwin's assembly and distribution center, located at 225 Peach Street, North Pointe Business Center, Ontelaunee Township, Pennsylvania was included as part of the Phase I assessment. A summary of the limited assessment activities performed at the assembly and distribution center is provided in Appendix A of this report.

Since 1956 the Site has been used for industrial purposes to manufacture custom brass builder's hardware from solid forged, machined, or stamped brass. Available documentation on the industrial processes, including hazardous materials use and waste management practices, between 1956 and 1964 is limited. Documentation on the off-site disposal of hazardous wastes was not available for the years of operation prior to the early-to-mid 1980s. The possibility that hazardous wastes may have been disposed at the site property is of particular concern given references to historic filling practices made in various later documents.

Remedial efforts are on-going at the subject property to address the presence of volatile organic compounds, primarily trichloroethylene, in groundwater. The only reported source of the trichloroethylene contamination is the former industrial waste sludge "drying beds". Other groundwater contaminants at the site include various metals. The remedial efforts involve the treatment of groundwater extracted from the site. This system has been ineffective in remediating the groundwater. At best, the system is providing hydraulic containment to prevent any further migration of the groundwater contaminants. Additional remedial efforts will be necessary to achieve the groundwater cleanup goal for trichloroethylene.

Although a number of environmental assessments have been performed at the site, most assessments have focused on the efficacy of the groundwater treatment system. A comprehensive source area investigation has never been performed at the Site. It is likely that multiple sources of groundwater contamination exist. In addition to the on-going remedial response required to address the groundwater contamination, there is a high potential that remedial response will also be required to address a number of other recognized environmental conditions identified at the site. Some of these conditions may have resulted from the relatively poor compliance history at the facility.



1. INTRODUCTION

1.1 Purpose

Loureiro Engineering Associates, Inc. (LEA) has been retained by The Black & Decker Corporation to conduct a Phase I Environmental Site Assessment (Phase I) of Masco Corporation's Baldwin Hardware Manufacturing Corporation (Baldwin). The Baldwin facility is located at 841 East Wyomissing Boulevard in Reading, Pennsylvania, hereinafter identified as "the Site". The findings of the Phase I assessment performed by LEA are presented in this report.

A limited assessment of a separate parcel identified as Baldwin's assembly and distribution center was also performed as part of this Phase I. This facility is located at 225 Peach Street, North Pointe Business Center in Ontelaunee Township, Pennsylvania. The findings of the limited assessment of the assembly and distribution center are presented in the summary provided as Appendix A. The Phase I, as described in this report, principally focused on the Site.

This Phase I was performed in conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments, E 1527-00. The purpose of this Phase I was to evaluate Site history, existing observable conditions, current and historic Site use, as well as current and historic uses of surrounding properties to identify the potential presence of Recognized Environmental Conditions (RECs) in connection with the Site.

The ASTM Standard defines RECs as "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on a property or into the ground, groundwater, or surface water of the property." The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* are not RECs.

In addition, the Standard requires that historical RECs (HRECs) and known or suspect environmental conditions be identified in the Phase I report. The standard defines HRECs as



environmental conditions “that in the past would have been considered a recognized environmental condition, but that may or may not be considered a recognized environmental condition currently”.

This report has been prepared to document the Phase I performed by LEA. The primary purpose of this report is to present our findings and conclusions resulting from our inquiry into the historical use of the Site property. The information contained within this report includes a detailed description of the Site and a general description of the surrounding properties that could potentially impact the environmental conditions of the Site. The ASTM E 1527-00 Standard requires an opinion of the potential impacts of RECs identified on a site during a Phase I. The summary presented in this report provides this opinion. The summary is intended to aid in an evaluation of the “business environmental risk” associated with the Site, defined by ASTM as “a risk that can have a material environmental or environmentally-driven financial impact on the business associated with the current or planned use of a parcel or commercial real estate.”

1.2 Scope of Services

The scope of services performed by LEA in obtaining information on the historical use of the Site, and the current condition of the Site and surrounding properties included a review of reasonably ascertainable standard historical sources of information. The scope of services also included a reconnaissance of the Site and interviews with facility personnel. Specifically, the tasks performed in completing this Phase I included:

- A review of environmental records pertaining to the Baldwin facility that were provided by Masco Corporation;
- A review of physical setting source information, including United States Geological Survey (USGS) topographic maps, United States Department of Agriculture’s (USDA) Soil Conservation Service (SCS) soil survey information, and physical setting sources of information about the hydrologic, hydrogeologic, and geologic characteristics of the Site;
- A reconnaissance of the Site to visually observe current conditions of the property in evaluating the nature and type of activities that have been or are being conducted that may give rise to RECs;
- Interviews with facility personnel during the Site reconnaissance to ascertain the history and nature of Site facility operations;
- A review of additional environmental records pertaining to the Baldwin facility that were requested of Masco Corporation following the Site reconnaissance and interviews with facility personnel;



- A review of environmental records made available at the Pennsylvania Department of Environmental Protection (DEP; formerly the Pennsylvania Department of Environmental Resources) Southcentral Regional Office located in Harrisburg, Pennsylvania;
- Interviews with county and local municipal agency personnel regarding the Site, and a review of applicable information made available;
- A search of the historical ownership of the Site property (chain-of-title search) to identify past property use that may give rise to RECs;
- A review of federal and state environmental database information within the ASTM-specified approximate minimum search distances from the Site property using a database service that maintains a network of information databases and that provides information relative to current and historic environmental risk associated with the Site property;
- A review of historical use information, including City Directories, aerial photographs, historical topographic maps, and other historical use sources; and
- The compilation and evaluation of all of the information obtained as a result of the tasks mentioned above, and preparation of this Phase I report which includes an assessment of the potential risks associated with each REC, as defined by the ASTM E 1527-00 Standard.

1.3 Non-Scope Considerations

The ASTM E 1527-00 Standard includes the following list of “additional issues” that are non-scope considerations beyond the scope of the ASTM Phase I Standard practice: Asbestos-Containing Materials (ACM), Radon, Lead-based Paint, Lead in Drinking Water, Cultural and Historic Risks, Industrial Hygiene, Health and Safety, Ecological Resources, Indoor Air Quality, Toxic Mold, Fluorescent Light Ballasts, and High Voltage Power Lines. These items were not included in this Phase I assessment of the property.

A limited assessment of the presence of polychlorinated biphenyls (PCBs) is included in the ASTM Standard work scope. Accordingly, this Phase I assessment included an assessment of the presence of PCBs limited to those potential sources specified in the ASTM Standard as “electrical or hydraulic equipment known or likely to contain PCBs... to the extent visually and/or physically observed or identified from the interview or records review.”

1.4 Exceptions and Deviations

The ASTM E 1527-00 Standard requires that all deletions, deviations, and additions from the Standard practice (if any) be listed individually and in detail. The Phase I of the Site (Baldwin facility located at 841 East Wyomissing Boulevard) was performed in substantial conformance with the ASTM E 1527-00 Standard. There were no additions made to, or deletions or deviations made from, the ASTM work scope. The limited Phase I activities associated with



Baldwin's assembly and distribution center (located at 225 Peach Street, North Pointe Business Center, Ontelaunee Township) did not include the full scope of work as described in the ASTM E 1527-00 Standard. The limited Phase I activities performed on this property included a reconnaissance of the property, interviews with Baldwin personnel, and a review of limited documents provided by Masco Corporation. Deviations to the ASTM Phase I work scope for this property included the following:

- The limited Phase I activities performed for the property did not include a review of records pertaining to properties within the approximate minimum search distance that may help assess the likelihood of migrating hazardous substances or petroleum products.
- The limited Phase I activities for the property did not include a review of federal and state standard environmental sources, physical setting sources, standard historical sources, or interviews with governmental officials.

1.5 Limitations

The Phase I described in this report was performed generally consistent with the ASTM E 1527-00 Standard for Phase I Environmental Site Assessments. This Phase I report is consistent with the ASTM E 1527-00 Standard, which may vary from the specific "guidelines" or "standards" required by other organizations. This report has been prepared for the exclusive use of The Black & Decker Corporation. Use of this report by any person or entity other than The Black & Decker Corporation for any purpose whatsoever is expressly forbidden unless such other person or entity obtains written authorization from The Black & Decker Corporation. Use of this report by such other person or entity without the written authorization of The Black & Decker Corporation shall be at such other person's or entity's sole risk, and shall be without legal exposure or liability to LEA.



2. SITE DESCRIPTION

2.1 Site Location

The Site is situated on the outskirts of the City of Reading, Pennsylvania and within the County of Berks (Figure 1). The Site has a physical address of 841 East Wyomissing Boulevard, Reading, Pennsylvania 19603 and is located at the northeast intersection of East Wyomissing Boulevard, Hancock Boulevard, and Wyomissing Boulevard. Located approximately one-half mile west of the intersection of State Routes 222, 422, and 10, the Site is identified on the Property Map of Berks County, Pennsylvania as Parcel Identifier: 5306 10 45 3607 (Figure 2).

2.2 Site Vicinity

The area surrounding the Site may be characterized as a mixed residential, commercial, and industrial setting. The Site is bounded to the East by property owned by Conrail (Reading Company Belt Railroad tracks) across which lies a community park (Schlegel Park); to the northeast by the Schuylkill River beyond which lies the City of Reading; and to the southeast by Interstate Container Corporation. The center of the Site is located approximately 2,500 feet southwest of the Schuylkill River. The Site is bounded to the south by Wyomissing Boulevard and land owned by the Reading Body Works. The Site is bounded to the west by East Wyomissing Boulevard. A low-income residential community is located on the west side of East Wyomissing Boulevard. Holy Name High School is located adjacent to the northwest corner of the Site property. The Site property is bounded to the north by land occupied by a radio tower (WHUM).

2.3 Site Characteristics

The Site encompasses 28.17 acres and is occupied by a manufacturing facility (Drawing 1). The facility is comprised of three units: (i) a main manufacturing unit referenced herein as the “Central Unit”; (ii) a “Lower Unit” that is used primarily for storage and shipping; and (iii) an “Administration Unit” that is used primarily for administrative offices, a show room, and a small cafeteria. The Central and Lower Units together occupy approximately 300,000 square feet (sq ft), and are connected by an enclosed tunnel/ramp.

The Central and Lower Units are generally constructed of concrete block and brick. The Administration Unit is constructed of concrete and has a glass façade. The interior floors are constructed of concrete. These structures at the Site are typical of manufacturing facilities.



The remainder of the Site property is occupied by a paved driveway entrance and guardhouse, parking and landscaped areas, unpaved equipment storage areas, and a gravel parking area. The only entrance to the facility is via the driveway entrance and the guardhouse. The guardhouse is manned 24 hours per day.

2.3.1 Central Unit

Most of the manufacturing operations are conducted within the Central Unit. This Unit includes the original Site structure built in the spring of 1956 when Baldwin opened the facility. The Central Unit has expanded over time and the various additions to the Unit are referred to as “Buildings”. The buildings within this unit are numbered 1 – 12 (Drawing 1). A summary of the age of the buildings that comprise the Central Unit and the other units at the Site is provided as Table 1. This table also provides a general description of the current use of each building.

As a result of the various stages of expansion, manufacturing processes within the Central Unit are to some extent “cellularized”. In 1956, the Central Unit consisted of Building 1. This building contained the entire hardware manufacturing operation. The receiving dock doubled as a shipping dock, next to which were located the shipping tables, packing tables, and stock room. A punch press department was located behind the stock room. Polishing operations were located against the west wall, and a vapor degreaser was located by the office door. A tool room and a separate enclosure, built to house the lacquer booth, were located against the north wall. A wash room and adjacent cafeteria table were included in this initial Site structure.

2.3.2 Lower Unit

The Lower Unit is comprised of Building 50, Building 51, and Building 51A, and is connected to the Central Unit via an enclosed tunnel/ramp that was constructed around 1968. Building 50 is currently used to receive and store materials and supplies, as well as to stage product prior to shipping the product to the assembly and distribution center located in Ontelaunee Township. Building 50 also houses the quality control department, development and testing laboratories, tool and machine shop, offices, and a training area. Prior to constructing the assembly and distribution center located in Ontelaunee Township, Building 50 was used by Baldwin as its warehouse and distribution center. Acquired by Baldwin in 1966, this building was formerly used as a Towne and Country department store.

Built by Baldwin around 1983, Building 51 houses a large barrier plating line and chemical storage area. Building 51A houses chemical stripping operations and chemical storage tanks.



2.3.3 Administration Unit

The Administration Unit is comprised solely of Building 75. This two-story building houses the administration, sales, marketing, and engineering departments, and includes a show room and small cafeteria. Already constructed when acquired by Baldwin on October 28, 1982, this building was formerly owned by Weis Markets and was used as a grocery store.

2.3.4 Utilities

Potable water is used at the Site for domestic, industrial process, and industrial cooling purposes. Plant processes requiring cooling or rinse water also utilize well water extracted from on-Site wells. Facility sanitary wastewater disposal is accomplished through a connection to the City of Reading publicly owned treatment works (POTW). Steam that is generated by boilers is used to heat the facility, as well as for manufacturing processes. The boilers are fueled by No. 6 fuel oil stored in an on-site underground storage tank (UST).

The area surrounding the Site is served with potable water. No private or public water supply wells or water intakes are known to exist within two miles of the Site. The nearest downstream public water supply intake on record is located approximately 18 miles from the Site in Pottstown, Pennsylvania.

2.3.5 Groundwater Remediation System and Monitoring Well Network

A remediation system that pumps and treats contaminated groundwater is located on Site. The groundwater remediation system consists of the following elements: an air stripping tower; three pumping wells (PS-1, PW-4, and PW-5); two “back-up” pumping wells (PS-2 and PS-3); and four monitoring wells (OW-1, OW-2, OW-3S, OW-3D). In addition, 20 piezometers (P-4S, P-4I, P-4D, P-5S, P-5D, PZ-10I, PZ-10D, PZ-20S, PZ-20I, PZ-20D, PZ-30S, PZ-30I, PZ-30D, PZ-40S, PZ-50S, PZ-50I, PZ-50D, PZ-60I, PZ-60D, and PZ-70I) are located on the Site and are used as groundwater elevation data collection points. Additional piezometers, P-1, P-2, P-3S, P-3I, and P-3D, which are used as part of the monitoring well network are located off-site. A more detailed discussion of the groundwater remediation system and monitoring well network is provided in Section 5.12.



2.4 Physical Setting

2.4.1 Overview

Subsurface explorations were not performed as part of this Phase I. Therefore, the Site physical setting was evaluated on the basis of readily-available public information, well logs from Site explorations conducted by others, and our understanding of subsurface conditions in the Reading, Pennsylvania area.

2.4.2 Physiographic Setting

The Site is located within the Great Valley Section of the Valley and Ridge Physiographic Province. This section is characterized by very broad, moderately dissected valleys having a gently undulating surface. The Site lies approximately one mile to the north of the boundary between the Great Valley Section and the northern edge of the Triassic Lowland Section of the Piedmont Physiographic Province.

2.4.3 Topographic Setting

The center of the Site property has been mapped within the USGS Reading, Pennsylvania Quadrangle at approximately -75° 56' 30" west longitude and 40° 19' 21" north latitude (Figure 1) (USGS 1999). The area surrounding the Site is characterized as having low to moderate topographic relief. The property slopes from north to south over an elevation of approximately 80 feet. The northern property boundary exists at an elevation of approximately 300 feet above mean sea level, referenced to the National Geodetic Vertical Datum (NGVD) of 1929. The southern property boundary exists at an elevation of approximately 220 feet above mean sea level (NGVD).

2.4.4 Surface and Subsurface Soils

The USDA's SCS has characterized the surface soils in the vicinity of the Site as well-drained silt loam soils (Hagerstown Silt Loam). These fine-grained silt and clay soils are characterized as having intermediate water holding capacity. These soils do not meet the requirements of a hydric soil.

As reported on the well logs prepared for the production and monitoring wells installed on the Site property, subsurface soils consist predominantly of silts and clays weathered from the underlying carbonate bedrock. The unconsolidated soils at the Site vary in thickness from 20 to



100 feet below ground surface (bgs). The variation in the thickness of the unconsolidated subsurface soils has resulted from differential weathering of the underlying carbonate system.

2.4.5 Bedrock

Carbonate rocks consisting primarily of limestone and dolomite underlie the Site and surrounding area. In the area of the Site, the carbonate rocks are inter-bedded with shale sequences. The bedrock formation beneath the Site has been mapped by the USGS as the Buffalo Springs, Formation, a light gray to pinkish gray finely to coarsely crystalline limestone and inter-bedded dolomite. Bedrock outcrops at the Site. Bedrock strike between N50-60°E with a gentle dip to the North (14-20°) was measured by DEP in an outcrop beside the plant near well OW-2. The geologic structure and the weathered nature of the bedrock may allow for the movement of groundwater in a northerly direction toward well OW-1.

2.4.6 Groundwater

Regional groundwater flow is from west to east across the Site with discharge to the Schuylkill River. Groundwater withdrawals at the Site, however, have resulted in local groundwater flow to the south-southeast. This local variation in flow from the regional flow conditions is most likely due to the fact that for the past 15 years, Baldwin has almost continuously extracted groundwater from the site at a rate of approximately 250-300 gallons per minute (gpm).

Groundwater exists at the Site within bedrock. The bedrock has virtually no primary porosity. The bedrock appears to contain thin fractures through which small amounts of groundwater flow. The bedrock also contains voids or solution fractures ranging in thicknesses of up to ten feet that are capable of producing greater quantities of water. There appears to be a hydraulic connection of unknown magnitude between the thin fractures and the thick, solution fractures or voids. The fractured limestone aquifer behaves as a single hydraulic unit when considered on a macro scale.

A vertical component of groundwater flow exists within the bedrock aquifer at the Site. The deep portion of the aquifer has a net upward component of groundwater flow, while the shallow portion of the aquifer has a net downward component of groundwater flow. It is noted that the Site lies within a zone of recharge. However, this zone terminates within the intermediate portion of the aquifer.

Groundwater contamination exists on Site, reportedly as a result of the facility's past usage of two unlined "drying beds" (surface impoundments) used for the storage of electroplating waste water treatment sludge.

2.4.7 Surface Water

The Site and surrounding area exist within the Schuylkill River Drainage Basin. The Site is situated between Wyomissing Creek, located approximately 2,000 feet to the north, and Angelica Creek, which is located approximately 6,000 feet to the south. Each tributary flows to the northeast and discharges into the Schuylkill River. A topographic high separates the Site from Wyomissing Creek.

Surface water runoff is controlled by a number of stormwater catch basins and by two drainage swales (Drawing 1). The drainage swales are located along the northern and southern property boundaries. In general, surface water drainage at the Site is to the south to southeast. Surface water flowing to the south across the Site is diverted east upon entering the drainage swale along the south property boundary and discharges at the southeastern corner of the property. Surface water flowing to the southeast drains directly to the Schuylkill River. The discharged surface water is directed through a drainage pipe that terminates at the Schuylkill River. The Schuylkill River is located approximately 2,500 feet northeast of the Site. The Schuylkill River empties into the Delaware River near Philadelphia, Pennsylvania.

The surface water classification of the Schuylkill River nearest the Site is “Warm Water Fishes/Migratory Fishes (WWF/MF)”. This fish aquatic life-use standard is the basis for all standards of surface water quality.

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for the Site, the facility is not located within a floodplain.



3. HISTORY

3.1 Present Use

Baldwin manufactures a complete line of premium, decorative custom brass builder's hardware, including Mortise locks, key-in-the-knob entry locks, lock trim, letter box plates, doorknobs, door knockers, door stops, door levers, switch plates, cabinet hardware, and push/kick plates. Baldwin also manufactures home décor items and giftware including lamps, candlestick holders, candlesticks, candelabras, trivets, and sconces. In addition, Baldwin manufactures a complete line of lighting and bathroom accessories. These products are primarily manufactured from solid forged, machined, or stamped brass. These brass parts are then polished and protectively coated, with or without a plated finish. The plated finishes include polished brass, antique brass, polished and dull chrome, antique and dull bronze, and black nickel antique finishes. Baldwin has been operating at the Site facility since the spring of 1956.

3.2 Former Use

A Chain-of-Title Report obtained through Environmental Data Resources, Inc. (EDR) is included in Appendix B. Based on this report and other historical information, the Site property is comprised of a parcel of land that formerly consisted of four distinct and separate parcels. The main parcel, upon which the initially-constructed buildings of the Central Unit are located, consisted of approximately seven acres of unoccupied land prior to its purchase by Baldwin in 1956. A second parcel, upon which the Administration Unit is located, consisted of approximately three acres of land formerly occupied by Weiss Markets, Inc. Baldwin purchased this parcel from Clyde Fry in 1982. Clyde Fry had purchased the parcel from Weiss Markets, Inc. in 1971. The parcel is believed to have been vacant prior to construction of the Weiss Markets, Inc. building in 1962. A third parcel, upon which the Lower Unit is located, consisted of approximately seven acres of land formerly occupied by a Towne and Country department store. Baldwin purchased this parcel in 1966. This parcel is believed to have been vacant prior to construction of the Towne and Country store. The construction date of the original Towne and Country store is not known. However, based on a review of a 1957 photograph, the store appears to be present at that time. A fourth parcel, upon which the eastern part of the Site is located, consisted of approximately eleven acres of unoccupied land formerly owned by the Reading Company. This parcel was purchased from the Reading Company in 1964.



4. RECORDS REVIEW

4.1 Introduction

As part of the Phase I, LEA reviewed reports, plans, and other documents on the Site that were made available by Masco Corporation. In addition, LEA reviewed records and gathered information pertaining to the Site and adjacent properties currently maintained by DEP, the City of Reading, and the County of Berks. The objective of reviewing these records was to aid in an evaluation of the “business environmental risk” associated with the Site.

As part of the records review process, a Freedom of Information Act (FOIA) request was made to the United States Environmental Protection Agency (EPA) – Region III under correspondence dated July 11, 2003. This request was made for the identification of all documents pertaining to the Site that are maintained by EPA. To augment the information that may be provided in a response obtained from EPA, Site information maintained by EPA on its Enforcement & Compliance History Online (ECHO) database and EPA’s Envirofacts database was reviewed.

LEA’s information gathering activities also included a review of published literature that describes the physical Site setting. The literature that was reviewed includes current DEP, USDA, FEMA, and USGS documents. This information gathering effort was supplemented with a review of an EDR report of the Site and surrounding area. The EDR report includes a summary of findings from a search of available environmental records for the Site and surrounding area, as well as a search of physical setting source information.

4.2 Previous Reports, Plans and Other Documents

Site information made available by Masco Corporation included various correspondence, drawings, and reports prepared by others. Based on these documents, the Site has been the subject of a number of environmental evaluations conducted by various consultants. For the most part, the environmental evaluations that have been performed at the Site pertain to an assessment of the existing Site groundwater contamination. The reports and plans prepared by others that were reviewed include the following:

Phase I Hydrogeologic Investigation Report prepared for Baldwin by Geraghty and Miller, Inc. to evaluate groundwater conditions in the vicinity of the two “drying beds” (March 5, 1983). This report included evaluating the existing database, taking water level measurements in plant production wells, and providing recommendations on a monitoring well system. As noted in this report, facility water lines were temporarily adapted to receive water from the local utility company during water level gauging.



Final Report of the Groundwater Quality Monitoring Survey of June 7, 1983 prepared for Baldwin by The Anspec Company, Inc. (August 8, 1983). Concentrations of benzene, 111-trichloroethane (TCA), trans-1,2-dichloroethylene (TDCE), and trichloroethylene (TCE) (1,600 parts per billion (ppb) at well OW-2) were reported to be present in groundwater at the Site.

Groundwater Investigation Report prepared for Baldwin by Keck Consulting Services, Inc. (November 1984).

Groundwater Remediation Plan prepared for Baldwin by Keck Consulting Services, Inc. (April 17, 1986).

Purge and Treatment System Certification Report prepared for Baldwin by Keck Consulting Services, Inc. and Ann Arbor Technical Services, Inc. (September 2, 1988).

1992 Annual Groundwater Purge System Operating Report prepared for Baldwin by Consolidated Engineers (January 22, 1993).

Compliance and Technical Review of the Groundwater Recovery System prepared for Baldwin by Environmental Resources, Management, Inc. (ERM) (April 16, 1993). As noted in this report, the potential for the presence of a dense non-aqueous phase liquid (DNAPL) exists at the Site due to the former use of the “drying beds”.

Draft Work Plan for the Source Investigation and Plume Delineation prepared for Baldwin by ERM (June 30, 1993).

Quarterly Monitoring/Annual Report prepared for Baldwin by ERM (March 21, 2002).

Quarterly Monitoring/Annual Report prepared for Baldwin by ERM (March 17, 2003).

Draft Groundwater P&T System Evaluation Report prepared by Conestoga-Rovers & Associates (CRA) (March 30, 2000). This report describes the results of an evaluation of the existing groundwater pump and treatment system. The primary goal of the evaluation was to assess whether or not the groundwater pump and treatment system is efficiently capturing and remediating groundwater beneath the Site. The evaluation was focused on providing an assessment of whether modifications should be made to the pump and treatment system or whether a new groundwater remediation approach is warranted.

Preparedness, Prevention, and Contingency (PPC) Plan prepared for Baldwin by ERM (August 14, 2002).

Draft Baldwin Environmental Management Plan prepared for Baldwin by ERM (October 1995, revised).

Comprehensive Groundwater Monitoring Evaluation prepared for EPA by DEP, inspection date April 29, 1999.

Final Report on Completion of Closure Plan prepared by Baldwin (date unknown).

Hazardous Materials Off-Site Emergency Response Plan for the Berks County Local Emergency Planning Committee (LEPC) (September 3, 2002).

Pollution Prevention Cost Reduction Opportunities prepared for Baldwin by PROCOR Technologies, Inc. (May 1997).



National Pollutant Discharge Elimination System (NPDES) Discharge Monitoring Reports prepared by Baldwin for the period January through June 2002.

4.3 DEP File Review

Under facsimile transmittal sheet dated July 3, 2003, a Right-To-Know Law Record Request was submitted to the DEP. The request was made for all records on the Baldwin Hardware Manufacturing Corporation and the Masco Corporation that are maintained by the following programs: Environmental Cleanup; Storage Tanks; Emergency Response; Waste Management; Air Quality; Water Management – Soils and Waterways; and Water Management – Water Pollution.

Based on this request, DEP made available records maintained by these programs. LEA reviewed the records made available on Tuesday July 8, 2003 at DEP's Southcentral Regional Office, 909 Elmerton Avenue, Harrisburg, PA 17110. In summary, the records mostly relate to waste management inspection and compliance, enforcement, and permitting issues. Specifically, the records include documents pertaining to the former hazardous waste sludge "drying beds" and groundwater contamination at the Site. The records also include a number of Notices of Violation (NOV). Most of these notices resulted from the improper handling and storage of hazardous materials at the facility, identified by DEP during hazardous waste compliance inspections. Other NOVs resulted from Baldwin's failure to submit reports in a timely manner, and to conduct required training.

4.4 Local File Review and Interviews

Files maintained by various offices of the County of Berks were reviewed, including information that is maintained by the Berks County Recorder of Deeds and the Berks County Mapping Department. The Berks County Emergency Management Agency (LEPC) was contacted to identify whether or not they maintain any information on the Site property. No information was provided by this agency.

In addition, a request was made for information maintained by the Historical Society of Berks County Museum and Library. The Historical Society provided excerpts from *A Survivor's Story, Memoirs of Severin Fayerman*. Severin Fayerman founded Baldwin Hardware Manufacturing Corporation. This document provides information on the history of Baldwin, particularly during the founding years of the company. The Historical Society also provided excerpts from two newspaper articles on Severin Fayerman and the Baldwin Hardware Manufacturing Corporation.

Lastly, the Historical Society provided copies of City Directories from 1959, 1963, and 2002-2003.

Offices of the City of Reading were also contacted to obtain information on the Site. These offices included the Zoning Office and the Fire Marshall's Office. No information on the Site property was provided by these offices.

4.5 EPA-Maintained Files

In response to the FOIA request submitted on July 11, 2003, Ms. Joan McQuillen (EPA) contacted LEA on July 31, 2003 and identified that EPA's Resource, Conservation, and Recovery Act (RCRA) program has numerous files pertaining to the Site. Ms. McQuillen stated that a written response to the FOIA request that includes a summary of which EPA programs maintain information on the Site would be forthcoming, however a date was not specified.

Information maintained by EPA on its ECHO database includes a summary of information on air emissions, as well as toxic release inventory (TRI) reporting information. Information maintained by EPA on its Envirofacts database includes Biennial Reporting System (BRS) information on the amount of waste generated, managed, shipped, and disposed. The Envirofacts database also identifies off-site disposal facilities.

4.6 Literature Review

Information obtained from technical resources was reviewed to provide information on the physical site setting. This information included information from resources published by DEP, USDA, FEMA, and the USGS, including information from:

- USDA Soil Survey of Berks County, Pennsylvania.
- FEMA flood plain panel 42011C0504E.
- DEP Bedrock Geological Map of Pennsylvania.
- USGS 7.5 Minute Series Quadrangle for Reading Pennsylvania

LEA used the information obtained in reviewing these records to evaluate the Site and adjacent properties, as summarized in Section 2.

4.7 Environmental Data Resources, Inc. Report

At the request of LEA, EDR performed an information search of the Site area. EDR maintains a network of information databases and provides information relative to current and historic



environmental risk associated with real property. The search performed for the Site property included both a search of available environmental records, and a search of physical setting source information for the Site and surrounding area. The search that was performed satisfies the government records search requirements of ASTM E 1527-00. A copy of the EDR report is provided as Appendix B.

4.7.1 Environmental Records

Information databases were searched to identify properties that may be listed in various environmental agency program records. The program records that were searched and a summary of the findings are provided below.

The Site was identified in the following government records:

- FINDS.
- SWF/LF
- RCRIS-LQG
- TRIS
- RAATS
- CERC-NFRAP
- AST
- CORRACTS

Surrounding sites were identified in the following government records:

- LUST
- VCP
- Former MGP
- RCRIS-LQG

No mapped sites were identified in the search of available records either on the Site or within the ASTM E 1527-00 search radius around the Site for the following government records:

Federal ASTM Standard:

- NPL Sites
- Proposed NPL Sites
- CERCLIS Sites
- RCRIS-TSD Facilities



- ERNS
- RCRIS-SQG

State ASTM Standard:

- SHW Sites
- UST

Federal ASTM Supplemental:

- CONSENT
- ROD
- De-Listed NPL
- HMIRS
- MLTS
- MINES
- NPL Liens
- PADs
- DOD
- TSCA
- SSTS
- FTTS

State or Local ASTM Supplemental:

- LAST
- ACT 2 DEED
- FTTS

Brownfields Databases:

- Inst Control

A summary of the information provided for each of the above-listed programs for which properties were identified is provided as follows:

FINDS – Facility Index System (FINDS) is a database source that contains both facility information and “pointers” to other sources of information, including PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket

used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System, STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System) . The Site is included in the FINDS database.

SWF/LF – Solid Waste Facilities/Landfill Sites (SWF/LF) is an inventory of solid waste disposal facilities or landfills in a particular state. The Site is identified on Pennsylvania's SWF/LF database because of the former use of an on-Site incinerator.

RCRIS - The Resource Conservation and Recovery Information System (RCRIS) is a database that includes information on sites that generate, store, treat, or dispose of hazardous waste as defined by RCRA. The Site facility is listed on RCRIS as a large quantity generator (LQG). In addition, there is one RCRIS-LQG facility (Reading Bodyworks Inc.) located approximately 0.25 miles to the South of the Site.

In the RCRIS corrective action summary, it is noted that a RCRA Facility Assessment (RFA) was completed at the Site in 1984. The need for a RCRA Facility Investigation (RFI) was identified, however, with the April 1987 Administrative Order on Consent (AOC) agreement pertaining to Site groundwater contamination, this need was identified as no longer necessary ("RFI imposition"). Also, it is noted that based on the stabilization measures evaluation provided in June 1992, EPA notes that the Site is amenable to stabilization activity based on the status of corrective action work at the Site, technical factors, the degree of risk, timing consideration, and administrative considerations. It is also noted that based on a review of information contained in the environmental indicators (EI) determination provided in August 1995, current human exposures and the migration of contaminated groundwater are under control at the facility.

TRIS – Toxic Chemical Release Inventory System (TRIS) identifies facilities that release toxic chemicals to the air, water, and land in reportable quantities under the Superfund Amendments and Reauthorization Act (SARA) Title III Section 313. The Baldwin facility is included in the TRIS database.

RAATS – RCRA Administrative Action Tracking System (RAATS) contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. The Site is included in the RAATS database.



CERC-NFRAP – Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) sites designated “No Further Remedial Action Planned” (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the National Priorities List (NPL), or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of EPA’s Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites. The Site is listed on the NFRAP archive.

AST – The State of Pennsylvania listing of regulated Aboveground Storage Tanks (AST) includes the Site facility.

CORRACTS - Corrective Action Reports (CORRACTS) identifies hazardous waste handlers with RCRA corrective action activity. The Site is included on the CORRACTS list. The Site was assigned a low corrective action priority.

LUST – Leaking Underground Storage Tank (LUST) records contain an inventory of reported leaking underground storage tank incidents. Several LUST sites were reported to be located in the vicinity of the Site. These sites include:

- Interstate Container Corporation, Grace and Meade Streets, ~0.25-0.50 miles southeast of the Site
- Roland Hughes Texaco, 231 Lancaster Avenue, ~0.25 – 0.50 miles east of the Site
- G & G Classics Inc., 800 Lancaster Avenue, ~0.25-0.50 miles south-southeast of the Site
- Decarlos Auto Sales, 101 Lancaster Avenue, ~0.25-0.50 miles east-northeast of the Site
- Reading Redy Mix PLT, 810 New Holland Road, ~0.25-0.50 miles south-southeast of the Site
- Stagecoach Stop Restaurant (location not provided)
- Reading Tube Plant 2 (location not provided)
- Reading Tube Plant 1 (location not provided)
- Fairground Square Mall (location not provided)

VCP – Voluntary Cleanup Program (VCP) sites include sites in the Pennsylvania VCP. One VCP site is located within approximately one-half mile south-southeast of the Site: Eastern Industries, 810 New Holland Road



MGP – The Manufactured Gas Plant (MGP) sites list includes a listing of former coal gas sites. Two former coal gas sites are located within approximately one-half to one mile of the Site: Consumer Gas Company located at 460 Canal Street, east-northeast of the Site; and Reading Tannery, 210 Chestnut Street, northeast of the Site.

The sites referenced above are illustrated on maps provided in the EDR report (Appendix B). These site locations have not been field-verified.

4.7.2 Physical Setting Source Records

The information provided through a search of physical setting sources included information obtained from sources that include the following:

- USGS Topographic Map
- FEMA Flood Zone Maps
- National Wetland Inventory
- USDA-SCS
- Federal USGS Well Inventories

Physical setting source information provided by EDR also included aerial photographs, dated 1957, 1972, and 1999 (Appendix C). To provide a review of the historic use of the Site and surrounding properties, LEA reviewed these aerial photographs along with an aerial photograph obtained from the County of Berks Mapping Department, dated 1989, and undated aerial photographs provided by Masco Corporation. The information obtained from each photograph is summarized as follows:

1957 - Review of the 1957 aerial photograph indicates that the original seven-acre parcel is occupied by the initial facility Buildings. The parcel currently occupied by the Lower Unit is occupied by a building; presumably the Towne & Country Department store. The remaining parcels that comprise the current Site parcel appear to have been cleared, although they are undeveloped.

1972 – The 1972 aerial photograph documents the extent of the Central Unit prior to the construction of Building 12. This photograph also documents the extent of the Lower Unit prior to the construction of Building 51 and Building 51A. The former Weiss Market is also shown on the Site property in this photograph. The location of the former “drying beds” east of the Central Unit are shown. The most notable condition of the Site at this time is the apparent clearing or

ground disturbance adjacent to the “drying beds”, as well as to the east of the Central and Lower Units.

1989 – Review of the 1989 aerial photograph reveals the Site and surrounding areas existed generally as they exist today. Isolated areas of the Site east of Buildings 12 and 51A appear to have been used for the storage of materials at this time. Materials are also stored in the northeast corner of the Site, explained by Baldwin personnel to be used as an overflow, gravel parking lot. No cars are located in this area at this time. The materials that are stored appear to be stacked.

1999 - Review of the 1999 aerial photograph indicates that the Site and surrounding properties existed generally as they exist today.

Undated Photographs – Xerox copies of aerial photographs are of relatively poor quality. However, in one of the photographs it appears that the area now occupied by the southern portion of the upper parking lot is unoccupied. The upper parking lot is believed to have been extended to the south some time after this photograph was taken. The former “drying beds” are shown in this photograph. In one of the other photographs the area east of Building 51 and the former incinerator appears to have been cleared. The relatively poor quality of the copied photograph does not allow for further interpretation.

Physical setting source information provided by EDR also included City Directories (Appendix B). The City Directories were reviewed along with City Directories obtained from the Historical Society of Berks County. The City Directory abstract provided by EDR includes information obtained from business directories including city, cross reference, and telephone directories at approximately five-year intervals for the years spanning 1954 through 2002. Based on this information, use of the property was not identified until 1965. From 1965 to 2002, Baldwin is identified as the occupant of the property.

The City Directories provided by the Historical Society of Berks County include information provided in 1959, 1963, and 2002-2003 directories. Baldwin is identified as the occupant of the Site in each of these directories.

Historical USGS topographic maps provided through EDR were also reviewed to aid in the identification of historic uses of the Site and surrounding properties. Topographic maps from 1956, 1968, 1974, 1983, and 1999 were reviewed. Copies of these maps are included in Appendix D. The initial Site buildings of the Central Unit are shown on the 1956 map. The Interstate Container Corporation building to the southeast is also shown. The Reading Body Works facility is not present on this map. The 1968 map shows the locations of the Site

buildings and the surrounding industrial buildings generally as they exist today. Significant additional development of the immediate vicinity of the Site is not evident in the topographic maps reviewed for 1974, 1983, and 1999. It is noted that the 1999 map neglects to identify the location of the Baldwin and Reading Body Works facilities.

A request for information provided on Sanborn Fire Insurance Maps was made; however, EDR reported that there is no coverage for the area of the Site.



5. SITE RECONNAISSANCE AND KEY PERSONNEL INTERVIEWS

5.1 Introduction

On July 7 and 8, 2003 LEA personnel conducted a reconnaissance of the Site to observe existing conditions. During this Site reconnaissance, LEA personnel reviewed available environmental records maintained at the facility. Based on a preliminary review of the facility records, a request was made for copies of certain records so that they could be reviewed in more detail. The information obtained from these records was used to aid in the identification of RECs at the Site, as presented in this section and as illustrated on Drawing 1.

During the Site reconnaissance, LEA personnel interviewed several Baldwin employees, namely:

- Rolin Sugg, Vice President of Technology and Product Development – Mr. Sugg was identified as being responsible for the successful implementation of Baldwin's finishing process ("Lifetime Finish") of its brass products.
- Randy Stiles, Safety Manager – Mr. Stiles is a recent Baldwin hire, having been with the company for less than seven months.
- David Hancock, Manager of Environmental Services – Mr. Hancock is the key Baldwin employee that was interviewed during the Site reconnaissance. Mr. Hancock has been with Baldwin for approximately 15 years, and has been the Environmental Manager for approximately 11 years. He was identified as having the most knowledge of the day-to-day operations at the facility. On July 7, 2003, Mr. Hancock provided an overview of the facility layout, followed by a tour of each facility building. At this time, the facility was closed for an extended July 4 holiday. On July 8, 2003, Mr. Hancock provided a tour of the facility during operating conditions. The tour of the facility included a reconnaissance of the exterior, surrounding property, as well as the interior of each facility building.

During the Site reconnaissance, Mr. Hancock explained the operations within each area of the facility, and answered questions to the best of his ability regarding the environmental history of the Site. The pertinent findings of the Site reconnaissance and personnel interview process are discussed below. Photographs taken at the time of the reconnaissance are provided as Appendix E.

5.2 General Conditions

The grounds of the facility and the perimeter of the Site were reconnoitered. The facility is completely surrounded by a six to eight-foot-high, chain-link fence. All sections are topped with an additional foot of barbed wire. The Site property is primarily occupied by the Central Unit, Lower Unit, and Administration Unit. The remaining areas consist of asphalt parking/driveway



areas; landscaped areas; and gravel parking and storage areas. A description of these Site features and characteristics is presented in Section 2.3.

In general, the Site is well maintained. While there was no evidence of improper hazardous materials handling or disposal practices being conducted outside, some outside areas are used for material storage. These areas include the gravelly area southeast of Building 51 used to store three roll-off containers, “mooches” (used to move brass bars through the facility), wood pallets, wood crates, and metal storage racks. One of the roll-off containers is used to store the wood pallets and crates. Other outside areas include the area east of the courtyard and near the location of the former incinerator that is occupied by two residual waste and cardboard storage containers and a hydraulic trash compactor. Batteries used to power forklifts were stored adjacent to this area. Other exterior Site features include the on-Site wells, USTs, and ASTs. A more detailed discussion of how these features relate to RECs at the Site is provided in the sections that follow.

5.3 Manufacturing Processes

As explained by Baldwin personnel, approximately 800 people are employed at the Site. This estimate includes the 150 employees estimated to be employed by Baldwin at its assembly and distribution center located in Ontelaunee Township, Pennsylvania. At the Site, manufacturing operations are generally conducted over three shifts during a 24-hour/day, five-day/week work schedule. During the manufacturing process, Baldwin utilizes forging, machining, stamping, and shearing to form parts from brass rods, brass sheets, or brass rolls. Other parts are manufactured using bronze, aluminum, stainless steel, or plastic materials, but make up a small percentage of the product produced. Once a part is formed, it is typically machined in some way to facilitate assembly. This is accomplished through various drilling, tapping, and turning operations.

The parts are then typically processed through several finishing operations to produce high lustrous brass hardware. During these operations, parts are first ground on abrasive belts to remove parting lines, nicks, and dents. Then, through several polishing steps, the parts are buffed on various buffing wheels with various polishing compounds to develop the final finish. The parts are then coated to prevent oxidation. The manufacturing process includes extensive plating operations, producing chrome, bronze, brass, zinc, and nickel plated items. To provide the high lustrous brass “lifetime finish”, a coat of nickel and palladium is electroplated onto the outer surface of each part (physical vapor deposition (PVD) coating). The parts are then finished with a final coat, 14 millionths of an inch thick, of zirconium nitride.

Other operations at the facility include an acid vibratory operation to remove graphite from manufactured parts and a spin finish operation utilizing wood chips impregnated with an



abrasive material. In support of the manufacturing operations, an environmental testing center is housed in building 50. The testing center includes the use of two ultraviolet cabinets, a cyclic corrosion chamber, a salt spray booth, and PVD lacquer testing equipment. Other supporting operations employed at the site include solvent degreasing operations. An on-Site wastewater treatment plant (WWTP) is used to treat plating and other process wastewaters. A summary of the manufacturing processes is provided for each facility building in Table 1.

5.4 Material and Chemical Storage Areas

All raw materials and process chemicals are received from off-Site vendors. Hazardous materials and chemicals that are received include: No. 6 fuel oil, acid and alkaline cleaners, caustic soda solution, refrigerated liquid nitrogen, nickel sulfate, nickel chloride, potassium cyanide, sulfur dioxide, sulfuric acid, a wastewater treatment chemical (MR-830), and TCE.

Raw material, product storage, and chemical loading and unloading areas are shown in Drawing 1. Materials and process chemicals are generally received at loading docks referenced as Docks 1, 2, 4, and 5. Oils and paints are received at Dock 1, along with brass rods and other raw materials. Various chemicals are received at Dock 2. These chemicals are stored in the adjacent area of Building 11. Dock 2 is also utilized for hazardous waste shipment. Dock 4, adjacent to Building 51A is used to receive drummed chemicals and bulk sulfuric acid. The drummed chemicals are stored in Building 51A. The sulfuric acid is stored in Building 51A in a portable tank having a capacity of 1,365 gallons. Liquid sulfuric acid is also stored in 55-gallon plastic drums in Building 11. Other hazardous materials are stored at the facility as follows: sulfur dioxide gas is stored in 150-pound cylinders in Building 11; and sodium cyanide and potassium cyanide are stored in various size steel containers (less than 55-gallon) in Building 11.

Dock 5 is located adjacent to the paint kitchen and is used to receive drummed solvents. The drums are stored in the paint kitchen and in the adjacent lacquer storage area of Building 12. Other chemical receiving and storage areas include Building 51A, where caustic deliveries are made and stored in a portable caustic tank having a capacity of 750 gallons. Due to the “cellularized” structure of the facility operations, many materials and chemicals are stored in various other areas of the facility. Chemical storage areas also include the various USTs and ASTs located at the Site.

5.5 Underground Storage Tanks

Baldwin has operated a number of USTs at the Site (UST Facility ID No. 06-14219). At the present time, Baldwin only operates one UST (UST No. 005). This tank is located adjacent to



Dock 2, and has a capacity of 15,000 gallons. This UST is used to store No. 6 fuel oil that is used to heat steam boilers located in the boiler room. Installed on June 29, 1998, the cathodic protection system of this double wall STIP-3 UST was last tested on February 17, 2000. The UST exhibited a cathodic protection reading indicative of a properly operating system. Leak detection records for this UST were not obtained for review.

Four other USTs have previously been used at the Site. USTs formerly used at the Site include a 15,000-gallon No. 6 fuel oil UST (UST No. 001) that was installed in 1976. This UST was removed on June 30, 1998 and was replaced by UST No. 005. As reported on the January 5, 1999 UST Closure Report Form submitted to DEP, there was no evidence of a release of fuel oil from this tank. The UST was reported to be in good condition with minor surface corrosion. The results of the post-excavation confirmatory samples that were obtained were reported to be below the applicable regulatory clean-up criteria. Only part of the UST piping system was removed. There is no record that the remaining piping was properly abandoned in place. Soil removed along with the UST was temporarily staged on-site for future use as fill. There is no record indicating that the excavated soil was sampled. Likewise, there is no record identifying the fill location of the excavated soil.

USTs previously used at the Site also include two 1,000-gallon USTs formerly located adjacent to Building 2A (UST No. 002 and UST No. 003). UST No. 2 was installed in August 1979, and UST No. 003 was installed in May 1981. Both tanks were installed with dispensing pumps. The USTs were used to store and dispense gasoline. Based on the records that were reviewed, the northern-most UST may have also been used to store and dispense diesel fuel. As provided in an August 10, 1990 UST Closure Report, Baldwin removed the two 1,000-gallon USTs on August 2 and 3, 1990. These tanks were removed to reduce Baldwin's potential environmental liability associated with the UST operations. Based on the results of six soil samples obtained from three feet below the tanks, DEP granted approval to backfill the tank areas after removal. The areas vacated by the tanks were backfilled using the excavated soils and crushed stone.

The USTs previously operated at the Site also include a 10,000-gallon UST used to store No. 6 fuel oil. As provided on a December 20, 1989 UST Registration form, this tank was permanently out of use. A drawing obtained from a review of facility records identifies the location of this UST beneath the boiler room. This UST is apparently abandoned-in-place. No other records were obtained pertaining to the use of this UST.



5.6 Aboveground Storage Tanks

In addition to the aforementioned 1,365-gallon, portable sulfuric acid tank and the 750-gallon, portable caustic tank located in Building 51A, three other ASTs are used at the Site. The ASTs in use include a refrigerated liquid nitrogen tank located adjacent to the groundwater treatment system and Building 12; a 1,400-gallon AST (AST No. 001) used to store TCE in an area adjacent to the paint kitchen of Building 12; and a 1,000-gallon waste oil AST located adjacent to Building 7. This AST is used to temporarily store waste cutting and synthetic oils prior to off-Site disposal as a residual waste. No records were reviewed that identified the tank number of this AST. During the Site reconnaissance, stains were noted on the ground in the area of this AST.

A storage tank registration form dated December 20, 1989 identifies a 300-gallon diesel fuel AST (AST No. 002) in use at that time. However, facility drawings and records that were reviewed do not include information on this AST. The location of this AST is not known, nor is it known whether this AST is still in service.

During the Site reconnaissance, Baldwin personnel noted that a 3,000-gallon AST was formerly located adjacent to Building 9 and Building 10. As noted, this AST was used to store TCE. No documentation pertaining to this AST was obtained during the information gathering process.

Also, during a hazardous waste compliance inspection conducted on April 22, and 25, 1994, DEP noted that “wastewater” generated during the vapor degreaser cleanout process was being temporarily stored in a “containment pit” in the lacquer paint kitchen (Building 12). It is believed that the mention of “wastewater” may actually be a reference to solvent (TCE) given the operation of vapor degreasers and the following explanation provided by Baldwin. As provided by Baldwin, the containment pit was kept empty until a degreaser clean-out was scheduled. “Wastewater” (solvent) from the cleanout process was temporarily stored in the containment pit, was scheduled to be pumped out within 72 hours, and was used for this purpose every ten to twelve weeks. Baldwin further provided that upon inspection, the pit was found to be sound; Baldwin did not observe any indication of material loss. A 1,400-gallon AST (AST No. 001) is now situated within the containment pit. As provided in the storage tank registration records for the Site, this AST is used to store virgin TCE. Stains were observed on the outside of this AST, apparently from tank overfills. Stains were also observed on the inside walls of the containment pit. It is unclear where Baldwin currently stores “wastewater” (solvent) from the temporary cleanout of the vapor degreaser located in this area.



5.7 Boiler Room

Three Cleaver Brooks, Inc. boilers are housed in the boiler room and are used to generate steam that is used in heating the facility buildings as well as in the manufacturing process. The dates on the boilers are 1965, 1973, and 1982. During the Site reconnaissance, the 1973 boiler was being serviced. An isolated area of the floor appeared to be wet in the vicinity of this boiler.

5.8 Waste Streams

Wastes generated at the Site include sanitary and process wastewaters, residual wastes, and hazardous wastes. Sanitary wastewaters are routed to the City of Reading POTW. Process wastewaters are treated via the on-Site WWTP, prior to being discharged to the Schuylkill River under NPDES Permit Number PA 0011371.

Any brass metal, whether chips from drilling or flashing from forging operations, is collected and recycled into raw material and reused. Residual wastes (used oil, water, and coolant; paint filters; spent polishing wheels and bar nubbins; discarded parts; dilute metal solutions; and plant trash) are disposed at authorized off-Site recycling or disposal facilities. However, prior to 1995, Baldwin operated an incinerator to dispose of its facility refuse. The incinerator was located in an area that is currently adjacent to Building 51A. The incinerator is described as a “municipal incinerator”. It is not known if other wastes were incinerated in addition to the facility trash.

Several hazardous waste streams are generated as a result of the manufacturing process described in Section 5.3. The waste streams are as follows:

- Waste TCE cleaning solvent (F001);
- Waste flammable solvents from coating operations (F003, F005, and D001);
- Electroplating waste treatment sludge from plating operations (F006);
- Waste mineral spirits from parts cleaners (D001);
- Waste alkaline and acid solutions from plating operations (D002);
- Waste polishing (buffing) dust from polishing operations (D008); and
- Waste cyanide plating solutions (D007).

These hazardous wastes are routed to off-Site secondary smelting, hazardous waste treatment, or hazardous waste disposal facilities.

5.9 Waste Handling, Storage, and Treatment

5.9.1 Waste Handling, Storage, and Treatment Areas

The waste handling, storage, and treatment areas are shown in Drawing 1. For the management of residual wastes, these areas include the area east of the courtyard that is occupied by two residual waste and cardboard storage containers and a hydraulic trash compactor. For the management of hazardous wastes these areas include a hazardous waste (less than 90 day) drum storage area within Building 9, and a hazardous waste (less than 90 day) storage area within Building 16 (buffing dust storage area).

The buffing dust waste that is stored in Building 16 is stored in one-cubic yard (cy) open-lid bins. This waste is reportedly transferred into lined 20-cyd roll-off containers every two weeks in preparation for off-Site transportation and disposal. It is noted that a drain in Building 16 is shown on the Site utility plan to discharge to grade outside of the building. It is further noted that the buffing waste material may be dispersed as a result of exposure to wind due to the proximity of the open containers to Loading Dock 5. The buffing dust may also be transported to other areas of the facility via foot and/or forklift traffic. Moreover, a review of the facility records revealed the following:

- An invoice from Empire Wrecking Co. of Reading, Pennsylvania for the removal of contaminated soil from the "buffing area". No other information on this matter was maintained in the facility file, or was provided by Baldwin.
- A purchase order requisition from Baldwin for the excavation, transportation, and disposal of contaminated stones/soil removed from a location behind Building 12. The contaminated stones/soil were removed on August 15, 1995. No other information on this matter was maintained in the facility files, or was provided by Baldwin.
- A Baldwin purchase order dated October 23, 1996 and referencing Elk Environmental Services of Reading, Pennsylvania, a spill response contractor, was issued for the transportation and disposal of soil contaminated with buffing dust. This material was apparently disposed at The Environmental Quality Company's facility located in Belleville, Michigan. No other information on this matter was maintained in the facility files, or was provided by Baldwin.

These records suggest that hazardous buffing dust wastes have resulted in past impacts to the soil on Site.

The waste handling, storage, and treatment areas also include the WWTP housed in Building 11, and the associated electroplating waste treatment sludge dumpster room, adjacent to Loading Dock 2. Hazardous wastes are shipped from Dock 2. During the Site reconnaissance, part of

the WWTP was observed to be under repair. Standing wastewater was observed to be around several of the treatment components. Floors in the basement of the WWTP had considerable staining and the bottoms of doors within the basement were corroded; evidence that there has been a past release of hazardous substances and/or standing wastewater within this area. No records were discovered of an impact assessment of any releases from the existing WWTP operations. In general, the area of the WWTP was observed to be an area that has been subject to past releases.

5.9.2 Wastewater Treatment Plant

During the manufacturing process, the facility generates heavy metal and cyanide-bearing wastes as well as concentrated acid and alkaline wastewater from its electroplating and finishing operations. When the WWTP was brought on-line in 1964, heavy metals from the wastewater treatment system, plus the slurry from the batch acid/alkaline treatment system, were pumped to the two on-Site “drying beds”. It is not known how process wastes were managed between 1956 (when the facility opened) and 1964. As provided in Baldwin’s hazardous waste permit application (RCRA Part A), after drying had occurred and the beds were filled, the dry cake leftover was to be removed. During the records review, no documents were identified that address the management of the dried sludge material.

The drying beds were reported to be taken out of service in March 1983. However, based upon available Site records, it was not until February 13, 1984 that all process wastewaters were directed to a new (existing) WWTP. This existing WWTP now provides for sludge de-watering and off-Site disposal of the electroplating waste treatment sludge. Treated wastewaters are now discharged to the Schuylkill River under the NPDES permit. It is not clear whether Baldwin had an NPDES discharge permit for WWTP discharges prior to bringing the existing plant online.

The existing WWTP is operated to treat the process wastes and consists of a cyanide destruction system, hexavalent chromium reduction system, chemical precipitation system, and a concentrated acid/alkali neutralization system. The chemical precipitation system includes pH adjustment tanks, a solids separator, a sand filter, and a filter press.

After bringing the existing system on-line in February 1984, the former wastewater treatment system was decommissioned. Correspondence dated April 26, 1984 describes a plan in which the former plant was to be decommissioned. Based on an inspection performed on October 20, 1984, DEP confirmed closure according to this plan. The process of decommissioning the former system, in accordance with the plan, is described in the May 1, 1985 Final Closure Report. While the report provides an accounting of the methods used to dismantle and



decommission the former treatment system, there is no accounting of any measures taken to assess any environmental impacts that may have resulted from the operation of the former system.

The area vacated by the former WWTP, believed to be an area within Building 10, is currently used to house polishing equipment. Following closure of the former WWTP, the concrete floor was upgraded to facilitate drainage from the polishing equipment to the new WWTP.

In support of the WWTP operations, Baldwin maintains an in-house laboratory. In addition to performing environmental analyses on wastewater samples, laboratory personnel provide assistance in production control.

5.9.3 Former Drying Beds

The “drying beds” (surface impoundments) were formerly located in areas now mostly occupied by Building 12 (Drawing 1). The “drying beds” consisted of an approximate 80,000-gallon surface impoundment that was used as the primary bed (Drying Bed #1). A second surface impoundment, documented to have a capacity of approximately 50,000 gallons, was used as an overflow impoundment (Drying Bed #2). Each “drying bed” was approximately five feet deep.

The “drying beds” were excavated on July 19 and 20, 1983. When the “drying beds” were closed, approximately two feet of sludge and soil from the base of the “drying beds” were removed. Post-excavation confirmatory samples obtained from the former locations of the “drying beds” were analyzed for RCRA 8 metals using extraction procedure-toxicity (EP Toxicity) methods. Based on the initial results of the post-excavation samples, no constituents above maximum allowable limits remained in Site soils. The beds were certified as closed by Baldwin and a certified professional engineer. However, post-excavation samples obtained from the area of Drying Bed #2, and analyzed by DEP, were reported to contain constituents above maximum allowable limits. Upon re-sampling, these results were confirmed by Baldwin.

Post-excavation confirmatory samples were again obtained following the excavation of additional soils from the former area of Drying Bed #2. The results of these samples were used in concluding that no constituents above the maximum allowable limits remained in Site soils. The “drying beds” were subsequently certified as closed in 1987.

During the lengthy process of closing the former “drying beds”, the samples were only analyzed for metals. None of the post-excavation soil samples were analyzed for other potential contaminants of concern. Moreover, the closure process involved a limited assessment of the

areas occupied by the former “drying beds”. The fact that the initial EP toxicity results were inconsistent suggests that some degree of layering or heterogeneity exists in the soils of the former “drying bed” areas.

5.10 Polychlorinated Biphenyls

A pad-mounted transformer is located on the Site property adjacent to the south side of Building 51 (Drawing 1). In addition, a pad-mounted transformer is located along the north side of Building 8 and Building 9. During the Site reconnaissance, Baldwin personnel explained that the transformers were not believed to contain PCBs. However, Baldwin has not tested the transformers for the presence of PCBs. It is not known whether the transformers contain or formerly contained PCBs. Baldwin personnel did state that a leaking transformer formerly installed at the Site had been tested for PCBs. No PCBs were detected in this transformer.

5.11 Asbestos-Containing Material

An assessment of ACM was not considered as part of this Phase I assessment. However, records that were reviewed include documentation that ACM were previously removed from the Site. The records also include documentation that ACM currently exists in the buildings at the Site. A summary of the pertinent records is provided in this section.

On November 9, 1995 the DEP issued a NOV to Baldwin for the improper removal of ACM. As cited, during the period from mid-June through August 1995 Baldwin removed approximately 40,000 square feet of asbestos floor tile, weighing approximately 54,000 pounds, from Building 50. The ACM was removed by untrained Baldwin employees utilizing hand tools including air chisels. The asbestos floor tile, made friable through the use of air chisels, was removed while assembly and production operations were conducted in adjacent work areas.

On February 5, 1996, Karl & Associates, Inc. performed an asbestos inspection that included bulk sampling at the facility. Asbestos was identified in 33 of the 96 samples that were obtained. ACM found to be present in the facility include thermal pipe insulation, floor tile, elbows/valves, tees, fire doors, and mastic. Roof materials, such as flashing and felt paper, were not sampled, but were assumed to contain asbestos. In addition, production machinery was identified to possibly contain asbestos. In the March 14, 1996 report prepared by Karl & Associates, Inc., it is stated that there appears to have been tiles throughout the package and assembly department (Building 50) that had been removed at one time. There are areas of mastic that held down the tiles and the mastic was never removed. The mastic tested positive for the presence of asbestos (15% asbestos).



To supplement the asbestos inspection performed by Karl & Associates, Inc., Baldwin contracted Environmental Options Group, Inc. (EOG) to perform additional sampling and quantification of ACM at the facility. EOG performed the supplemental asbestos inspection on January 27, 2001. The findings of this inspection were submitted to Baldwin on February 12, 2001, along with a recommendation and cost estimate to remove the mastic containing ACM. Asbestos was reported to be present in 30 of the 84 samples that were obtained. At the request of Baldwin, EOG submitted a revised report on April 9, 2001. The report identifies areas within the facility as having a high level of risk associated with ACM, including areas above one of the lunch rooms. No further documentation was discovered regarding ACM at the Site.

5.12 Groundwater Remediation System

5.12.1 Background

Prior to closing out the former “drying beds”, DEP required that Baldwin implement a groundwater monitoring program in fulfillment of the requirements of RCRA with respect to the surface impoundments (“drying beds”). As a result, Baldwin implemented groundwater monitoring activities for the former sludge “drying beds” in the spring of 1983. Volatile organic compounds (VOCs) were first reported to be present in Site groundwater when a groundwater sample obtained from well PS-1 on April 21, 1983 was reported to contain concentrations of PCE (1 ppb), TCE (710 ppb), and TDCE (27 ppb). TCE was also reported to be present in groundwater samples obtained on May 13, 1983 from Wells PS-2 (500 ppb) and PS-3 (12 ppb). At that time, the presence of VOCs in Site groundwater had been attributed to the former unlined “drying beds” used to store electroplating wastewater treatment sludge.

Following a number of groundwater investigations performed at the Site by others, it has been accepted that leakage and incidental spillage from the two “drying bed” units account for the groundwater contamination. This acknowledgement has been made, even though Baldwin has stated that wastes stored in the “drying beds” would not have typically contained significant levels of VOCs. No other sources of VOC contamination have been reported to have been investigated.

Current concentrations of TCE in Site groundwater exceed 1,000 ppb. Concentrations of various metals are also present in Site groundwater. Current reported concentrations of lead and chromium in Site groundwater exceed the corresponding maximum contaminant levels (MCLs). The presence of lead in groundwater is believed to have resulted from historic buffing dust waste handling and storage practices, and possibly on-Site disposal practices.



Pursuant to a RCRA §3008(h) Order (AOC), Baldwin was required to implement a groundwater remediation and monitoring program at the Site. This AOC became effective April 20, 1987. The Order specifically requires that the concentrations of TCE in groundwater be cleaned up to 5 ppb. Following the issuance of the AOC, a groundwater pump and treat system was designed and implemented.

5.12.2 System Design

The groundwater remediation system consists of the following elements: an air stripping tower; three pumping wells (PS-1, PW-4, and PW-5); two “back-up” pumping wells (PS-2 and PS-3); and four monitoring wells (OW-1, OW-2, OW-3S, OW-3D). In addition, 20 piezometers (P-4S, P-4I, P-4D, P-5S, P-5D, PZ-10I, PZ-10D, PZ-20S, PZ-20I, PZ-20D, PZ-30S, PZ-30I, PZ-30D, PZ-40S, PZ-50S, PZ-50I, PZ-50D, PZ-60I, PZ-60D, and PZ-70I) are located on the Site and are used as groundwater elevation data collection points. Additional piezometers, P-1, P-2, P-3S, P-3I, and P-3D, which are used as part of the monitoring well network, are located off-site. Monitoring wells MW-1, MW-2, MW-3, MW-4, MW-6, and MW-7 installed by Interstate Container Corporation on their property to address releases on their site are also used by Baldwin to gauge groundwater levels off-Site.

The groundwater remediation system is designed such that groundwater pumped from wells PS-1, PW-4, and PW-5 are combined and fed directly into the air stripping tower at a combined rate of approximately 250-300 gpm. In the event that one of these wells fails or otherwise may require extensive down time, one of the other production supply wells (PS-2 or PS-3) may be brought on-line to maintain the required groundwater pumping rate.

The tower has a diameter of 50 inches and a packing depth of 20 feet. Air is applied at a rate of 1,400 cubic feet per minute (cfm), for an air/water ratio of 30:1. The packing media consists of plastic saddles. The tower is also equipped with acid backwashing should the packing material become fouled and need to be cleaned.

The hydraulic capacity of the air stripping tower is approximately 350 gpm. The tower is designed to remove TCE with an efficiency of 98%, and is capable of reducing an estimated peak influent concentration of 5,000 ppb to an effluent concentration of 100 ppb.

The treated effluent is discharged from the tower into the existing plant clear well (Drawing 1). A portion of the effluent is used for process water needs. Treated process wastewater is directed back to the clear well. The unused portion of the air stripper effluent is mixed with the treated



process wastewater and non-contact cooling water and is discharged to the Schuylkill River under the NPDES permit.

5.12.3 System Performance

Groundwater remediation began on April 24, 1988. The post-startup monitoring program was completed on July 18, 1988. Since that time, the groundwater pump and treat system has been operating almost continuously; the system was reported to have been temporarily shut down during various aquifer characterizations and groundwater investigations.

The groundwater remediation system is performing as designed in effectively treating the water pumped from the recovery wells. Removal efficiencies are consistently in the 90 to 99 percent range and well within the 100 ppb limit established by the AOC. Based on a review of NPDES Discharge Monitoring Reports prepared for the period January through June 2003, Baldwin reported no incidents where limits were exceeded and there were no exceptions to any sampling or reporting requirements.

While the groundwater stripping efficiencies are meeting the design performance criteria, the groundwater pump and treat system is ineffective in removing the VOCs from the groundwater. Most of the contaminated groundwater is believed to be stored in shallow, thin bedrock fractures having limited transmissivity. Whereas, most of the groundwater is pumped from larger voids in the deep bedrock that contain limited contamination. As a result, the pump and treat system and existing well configuration have not resulted in significant progress toward attaining the TCE cleanup standard of 5 ppb.

In ERM's *Draft Work Plan for the Source Investigation and Plume Delineation*, dated June 30, 1993, it is documented that groundwater samples obtained in May 1993 from off-Site piezometers P-1 and P-2 contained dissolved concentrations of VOCs. Also, in correspondence addressed to Masco on July 26, 1994, ERM documented that groundwater samples obtained on April 12 and 14, 1994 from off-Site piezometers P-3S, P-3I, and P-3D located in Schlegel Park also contained dissolved concentrations of VOCs. A total VOC concentration greater than 100 ppb was reported to be present in the sample obtained from piezometer P-3I. ERM discussed the possibility that the source of VOCs in these off-Site piezometers may be the former "drying beds" or may be some other off-Site source. ERM also discussed the possibility that the system may not be completely capturing the contaminant plume. It is not known whether VOCs in groundwater may have migrated off-Site prior to the extraction of groundwater from the production wells. The results of the samples obtained from the off-Site piezometers were not



submitted to EPA because, as noted by ERM, these piezometers are not part of the monitoring program.

CRA subsequently performed an extensive evaluation of the groundwater pump and treat system as presented in the March 2000 report entitled *Draft Report for Groundwater Pump and Treat System Evaluation*. It is not clear whether this evaluation was performed with CRA's knowledge or consideration of the presence of VOCs in the off-Site piezometers. Based on this evaluation, which included a groundwater modeling component, CRA concluded that the pump and treat system effectively captures groundwater at the Site. LEA reviewed the report and groundwater modeling effort. Given the groundwater modeling that was performed, the conclusions made by CRA appear to be appropriate. However, an evaluation of the efficacy of the groundwater pump and treat system that includes an evaluation of the presence of VOCs in off-Site piezometers may be necessary to fully evaluate the pump and treat system.

Given the mass of contaminants in groundwater and the bedrock structure beneath the Site, the pump and treat system will not likely reach the AOC-required clean-up level. At best, the groundwater pump and treat system is providing hydraulic containment to prevent any further migration of TCE and other Site contaminants.

5.13 Additional Recognized Environmental Conditions

During the Site reconnaissance, a number of additional RECs were identified. The additional RECs not previously discussed are described in this section.

Plating Lines – Plating lines at the facility are located in Buildings 7, 8, 9, 10, 11, and 51. In addition a chemical strip line is located in Building 51A. A lacquer line formerly located in Building 9 has been removed. Plating operations (anodizing and barrel plating) began in 1965 in this Building. The unit on the old lacquer line was discontinued to comply with air quality regulations. During the Site reconnaissance, Baldwin personnel noted that the concrete sumps and containment area for the old lacquer line have been filled with concrete. The integrity of the concrete containment area was not verified before being filled; nor were any samples obtained from beneath the associated tanks to verify the environmental condition of the concrete or subsurface soil.

Former and Existing TCE Vapor Degreaser Areas – Baldwin operates four TCE vapor degreaser units. These units are located within the hand polishing/lathe area of Building 3; the machining and polishing area of Building 8; and adjacent to the lacquer paint kitchen of Building 12. A still



is attached to each unit. Chemical lines located beneath these units are located beneath grates and within concrete lined trenches.

In addition, Baldwin formerly operated a TCE vapor degreaser unit in the old lacquer line area of Building 9. At the on-set of facility operations in 1956, Building 1 also included a vapor degreaser. This unit was situated by the office door. Due to the nature of vapor degreasing operations, it is likely that hazardous substances may be found in this area, as well as the other existing and former areas of TCE vapor degreasers.

Lacquer Paint Kitchen - Stained floor conditions were observed within the lacquer paint kitchen of Building 12. In addition, there is a high volume of hazardous materials stored and used in this area. A number of 55-gallon drums containing various chemicals used in the lacquer paint kitchen operations are located in this room.

Possible Historic Fill Areas - Baldwin personnel pointed out that the upper parking lot in the northeast corner of the property had been backfilled with excess soil generated from on-site excavation. Neither the nature of the soil nor the reason for the on-site excavation was given. Based on the review of Site aerial photographs, it appears that areas of possible historic filling include areas adjacent to the former “drying beds” and east of the Central and Lower Units, as well as the southern extent of the upper parking lot and an area immediately east of this lot that has been used as an overflow, gravel parking area. In addition, references to other possible fill areas at the Site, including an area surrounding one of the production wells (PW-5), were discovered during a review of the facility records.

Spills/Stains on Facility Floor/Grounds - In general, the facility floors are exposed to various chemicals. Although secondary containment is typically provided for chemical storage areas, some of the floors are worn or eroded due to chemical exposure. In some areas, a protective coating on the floors was either absent or degraded. Areas where the floor had been stained by various materials include the forging area of Building 2A, the polishing area of Building 3A, and the Rose and Knob Cell area of Building 7. In addition, a black stain was observed on the asphalt area east of Building 51A. The asphalt in this area appeared to be cracked and disintegrated.

5.14 Additional Information

Through correspondence addressed to the City of Reading and the DEP, and dated April 14, 1993, Baldwin responded to an anonymous report that alleged that Baldwin dumped “33 gallons of radioactive material” into the city sewer system. The incident was alleged to have occurred

during the week of March 22, 1993. In the correspondence, Baldwin refuted the allegation, noting that Baldwin has never had any radioactive material on the Site. It was further emphasized that following an internal investigation and review of internal documentation, the anonymous allegation was unfounded and had no basis in fact.

In reviewing available documents, information was also discovered pertaining to the following:

- A Baldwin purchase order, was issued to Banty Corp of Cherry Hill, New Jersey for the transportation 120 cy (9 roll-offs) of “hazardous waste soil”. The purchase order was dated October 10, 1991. No other information on this matter was maintained in the facility files, or was provided by Baldwin.
- Hand-written notes maintained in Baldwin’s files, dated March 1, 1997, reference the possibility that when one of the on-Site wells (possibly production well PW-5) was installed, several feet of sludge were encountered during the drilling and well installation process. A soil boring investigation was performed in the area of well PW-5 as documented in CRA’s March 30, 2000 report entitled *Draft Report for Groundwater Pump and Treat System Evaluation*. Based on the findings of this investigation, no sludge and no contaminant source areas were identified in this area of the Site.



6. PERMITS AND AUTHORIZATIONS

6.1 Overview

Operations at the Site facility are conducted under a number of permits and authorizations. The key permits and authorizations are discussed in this section. In addition to these permits and authorizations, it is noted that operations are being conducted at the Site that may require additional permits or monitoring. Specifically, it is noted that various outdoor activities are conducted at the Site and no stormwater pollution control monitoring is performed at the Site. A stormwater pollution control permit is required where materials-handling may have the potential to generate releases to the ground. Outdoor materials-handling areas that could have the potential to generate releases to the ground include: areas where dust hoppers are replaced and transported; areas where buffing dust and baghouse dust is stored and shipped; the used oil AST pump-out area; and areas where bulk deliveries of No 6 fuel oil, TCE, and chemicals are made. In correspondence dated September 14, 1994, DEP states that a stormwater pollution control permit is only required if the activities are exposed to stormwater. It is further stated that, given the facility's SIC code (3429), stormwater monitoring is not required.

6.2 Hazardous Waste Activity Permit-By-Rule Status

Baldwin submitted a Notification of Hazardous Waste Activity on August 13, 1980, and a Part A permit application on November 7, 1980 to EPA. EPA acknowledged the facility's interim status in a letter to Baldwin dated July 21, 1981. On July 15, 1983, the DEP advised Baldwin that its facility was not a TSD facility, permitting it to operate under permit-by-rule status, and under its authority by primacy advised Baldwin that it was not required to file a Part B RCRA permit application and in fact returned Baldwin's original Part A permit application (subject to the interim status requirements of RCRA).

6.3 Air Permit

On December 22, 1999, DEP issued a Title V/State Operating Permit (Permit Number 06-05004) for the Baldwin facility. This permit became effective on January 1, 2000. The permit identifies a number of air emission sources including the Cleaver Brooks, Inc. steam boilers, the lacquer coating line and oven, conveyORIZED vapor degreasers, the groundwater treatment system air stripper, and a number of other air emission sources. The Title V permit expires on December 31, 2004. The application to renew the permit is required to be submitted to DEP by June 31, 2004.



6.4 NPDES Permit

On August 19, 1985, DEP issued a NPDES permit to the Baldwin facility (Permit Number PA0011371). This permit authorizes Baldwin to discharge process wastewater and groundwater treatment system effluent to the Schuylkill River at Outfall 001, along with stormwater runoff from the Site.

Based on the review of the available documents, it was discovered that under the NPDES permit process wastewater was initially discharged to an unlined ditch along the eastern property boundary. The exact location of this ditch could not be identified. Since the permit was issued, it was reported that the ditch was behaving as a losing stream because it lies within the capture zone of the groundwater pump and treat system. As a result, a certain percentage of VOCs may likely have been re-entering the groundwater system. To address this situation, EPA required that the ditch be evaluated and that a concrete pipe be installed to circumvent this “recycling” phenomenon. Based on the evaluation of this area, soils were discovered to be impacted by heavy metals. Approximately 250 cy of contaminated soil were excavated for off-Site disposal. Baldwin subsequently extended a concrete pipe completely to the concrete spillway structure located just upstream from the tiled storm drain.

Also, during an NPDES compliance inspection conducted on February 25, 1988, DEP discovered greenish deposits on the stream that receives the industrial waste discharge from Outfall 001. Laboratory analysis of a sample containing the deposits and the effluent confirmed extremely high concentrations of chromium, copper, nickel, and zinc. Baldwin was notified of the condition during the inspection and the fact that the metals constitute evidence of a metal plating wastewater treatment sludge, a listed hazardous waste. DEP subsequently issued an NOV, citing Baldwin for violations of the Pennsylvania Clean Streams Law and the Pennsylvania Solid Waste Management Act. In resolving this matter, the DEP accepted a monetary civil penalty payment for these violations, as described in the settlement letter dated May 17, 1989. No information was discovered regarding any additional action that may have been taken regarding this REC. The exact locations of the deposits or sampling location could not be identified.

It is not known what other constituents may have impacted Site soils and groundwater as a result of discharges to the drainage swale and Outfall 001.



6.5 Delaware River Basin Commission Approval

On August 5, 1987, the Delaware River Basin Commission (DRBC) authorized the Baldwin facility to withdraw groundwater as part of the groundwater remediation efforts (Docket Number D-87-32). This authorization stipulates that during any 30-day period, groundwater withdrawal from the Site shall not exceed 15.13 million gallons. The authorization requires that the flow of groundwater pumped from the Site be continuously measured. Limitations are also established in this authorization for the temperature of water discharged at Outfall 001. Pursuant to the authorization, Baldwin must monitor discharge at Outfall 001 and restrict the effluent temperature to a value less than 110° Fahrenheit. The DRBC authorization was subsequently renewed, however the renewed authorization apparently expired on December 9, 2002. Groundwater is apparently being extracted from the Site without formal DRBC authorization.



7. COMPLIANCE

7.1 Overview

Based on a review of available records, the Baldwin facility has been issued a number of NOV's. Most of these notices resulted from the improper handling and storage of hazardous materials at the facility, identified by DEP during hazardous waste compliance inspections. Other NOV's resulted from Baldwin's failure to cleanup accumulated dust under bag houses. NOV's have also resulted from Baldwin's failure to submit reports in a timely manner, and to conduct required training.

As described in Section 6, at least one NOV was issued as a result of an NPDES compliance inspection. Notices were also issued to Baldwin for failing to meet NPDES discharge limits, mostly due to high total dissolved solids (TDS) concentrations during the on-set of groundwater pump and treat system operations. In addition, a number of citations were issued as a result of violations identified during Occupational Health and Safety Administration (OSHA) inspections.

7.2 Administrative Orders on Consent

While some corrective action was required to address the NOV's, Baldwin often paid civil assessment penalties to address the non-compliance issues. Some of the corrective actions that were required to be taken by Baldwin have been completed. Other corrective actions are ongoing, such as those memorialized in the two AOCs described below.

7.2.1 Waste Management

As a result of uniform hazardous waste manifest reviews conducted by DEP, Baldwin was found to be in violation of Solid Waste Management Act rules and regulations. DEP issued a NOV to Baldwin on April 21, 2001 for these violations. In resolving this matter, Baldwin entered into an AOC with DEP on July 24, 2001 that requires Baldwin to purchase and implement the Envirowin[®] waste management computer tracking software. No other documentation pertaining to this matter was discovered in the available records that were reviewed.

7.2.2 Groundwater Contamination

To address the presence of VOCs in groundwater at the Site, Baldwin was ordered, pursuant to Section 3008(h) of RCRA, 42 U.S.C. Section 6928(h), to implement an on-Site groundwater remediation and monitoring program. This Order also requires Baldwin to verify the extent of



contamination and the effectiveness of the remedial program. This Order is very specific in that it dictates that Baldwin must pump wells PS-1, PW-4, and PW-5 at a rate sufficient to maintain the groundwater capture zone, but no less than 300 gpm without EPA approval. It is noted that based on records available at the time that the Order was issued, a total pumping rate of 115 gpm was determined to be necessary to control the contaminant plume, given initial estimates of transmissivity and hydraulic gradient. However, the facility's need for industrial process water, can be as high as 300 gpm, and therefore a total pumping rate of 300 gpm was established.

The Order also specifies that: (i) water levels must be measured monthly in wells OW-1, OW-2, PS-1, PW-2, PW-3, PW-4, and PW-5; and that (ii) pumped groundwater must be treated such that the air stripper effluent contains concentrations of TCE below 100 ppb. The effective date of the RCRA §3008(h) Corrective Action Consent Order is April 20, 1987.



8. SUMMARY

The Site has been used for industrial purposes since 1956. During this time, various industrial process waste streams have been generated. It is not known how these waste streams were managed prior to the early 1980's. Moreover, it is not known how Baldwin managed its process wastes between 1956 and 1964, prior to the use of the former "drying beds". Also, of particular importance is the lack of documentation regarding the off-Site disposal of hazardous waste prior to the early to mid-1980s. This lack of documentation, combined with the vague references to historic filling practices employed at the Site, raises concern with regard to the need for future remedial action.

Also of particular importance is the presence of VOCs and metals in groundwater at the Site and the presence of VOCs in groundwater downgradient of the Site property. DEP and EPA are apparently satisfied with the current performance of the groundwater treatment system. However, a comprehensive source area investigation has never been performed at the Site. It is likely that sources of VOCs and metals in groundwater exist at the Site, other than the former sludge "drying beds".

In addition to the presence of VOCs and metals in groundwater, 17 other RECs were identified during this Phase I. Many of these RECs have a high potential to require a remedial response. The locations of these RECs are depicted in Drawing 1, and a summary of each REC is provided below. As summarized, a description of each REC is provided along with an opinion of the significance of potential impacts.

REC#1: Groundwater Contamination

Potential Impact: High

Explanation: VOCs are present in Site groundwater. Current concentrations of TCE in Site groundwater exceed 1,000 ppb. Various metals are also present in Site groundwater. Concentrations of lead and chromium reported to be present in groundwater samples obtained from Site wells during the fourth quarter of 2002 exceed MCLs. It is unlikely that the existing groundwater pump and treat system will remediate the impacted groundwater to the cleanup limit specified in the AOC (5 ppb TCE). At best, the groundwater pump and treat system is acting as a containment barrier to prevent any further migration of TCE.

REC#2: Plating Lines

Potential Impact: High

Explanation: Plating lines at the facility are located in Buildings 7, 8, 9, 10, 11, and 51. In addition a chemical strip line is located in Building 51A. A lacquer line formerly located in Building 9 has been removed. Plating operations (anodizing and barrel plating) began in 1965 in this Building. The unit on the old lacquer line was discontinued to comply with air quality



regulations. During the Site reconnaissance, Baldwin personnel noted that the concrete sumps and containment area for the old lacquer line have been filled with concrete. The integrity of the concrete containment area was not verified before being filled; nor were any samples obtained from beneath the associated tanks to verify the environmental condition of the concrete or subsurface soil. Because plating line operations often result in spills into containment areas beneath the tanks, the current and former plating line areas represent areas having a high potential for future remedial response actions.

REC#3: Former Drying Beds

Potential Impact: High

Explanation: Closure of the former “drying beds” included limited post-excavation confirmatory sampling and analysis for heavy metals only. The areas of the former “drying beds” have not been thoroughly characterized.

REC#4: Former and Existing TCE Vapor Degreaser Areas

Potential Impact: High

Explanation: Given the nature of vapor degreasing operations, it is likely that hazardous substances may be found in soil and/or groundwater in areas of the Site facility where vapor degreasing operations have occurred. These areas have not been investigated for potential impacts to soil and/or groundwater.

REC#5: Former and Existing WWTP Areas

Potential Impact: High

Explanation: While the measures employed to dismantle and decommission the former WWTP system were in accordance with an approved plan, an assessment was not performed to identify impacts to soil and/or groundwater in this area of the Site. In addition, visual evidence of past spills and releases in the area of the existing WWTP provides a basis for identifying this area of the Site as a REC of high potential.

REC#6: Dust Handling and Storage Areas

Potential Impact: High

Explanation: As noted in various DEP hazardous waste compliance inspection reports, dust has accumulated below a number of the facility baghouse dust collectors. These areas are exposed to the elements. As a result, dust in these areas may likely have been dispersed to other areas of the Site and may have impacted Site surface soils. Also, dust that is stored in the buffing dust storage area of Building 12 may also be subject to dispersion. Moreover, facility records indicate that soils containing buffing dust have previously been excavated from the Site.

REC#7: Former and Existing AST Areas

Potential Impact: High

Explanation: The observed conditions of the 1,400-gallon AST containing TCE, and the associated waste containment pit near the lacquer paint kitchen of Building 12 provide the basis for characterizing this area as an area having a high potential impact. Because of visual evidence of stained ground conditions in the vicinity of the waste oil AST, the general nature of AST



operations, and the former location of a TCE AST adjacent to Building 9/10, the other AST locations have a high potential impact as well.

REC#8: Lacquer Paint Kitchen

Potential Impact: High

Explanation: During the Site reconnaissance, stained floor conditions were observed within the lacquer paint kitchen of Building 12. Because of the high volume of hazardous materials used in this area, the area is characterized as having a high potential impact.

REC#9: Discharge Swale/Outfall 001

Potential Impact: High

Explanation: Soils within the drainage swale along the eastern part of the Site were previously impacted by heavy metals. In addition, greenish deposits and elevated levels of metals were identified at Outfall 001. The exact locations of the impacted areas of the swale and discharge point could not be identified based on a review of available records. It is not known what other constituents may have impacted Site soils and groundwater as a result of discharges to the drainage swale and Outfall 001.

REC#10: Possible Historic Fill Areas

Potential Impact: High

Explanation: Based on the review of Site aerial photographs and information provided by Baldwin personnel, it appears that areas of possible historic filling include areas adjacent to the former “drying beds” and east of the Central and Lower units, as well as the southern extent of the upper parking lot and an area immediately east of this lot that has been used as an overflow, gravel parking area. In addition, references to other possible fill areas at the Site, including the area surrounding one of the production wells (PW-5), were discovered during a review of the facility records. Because of the various vague references to historic filling practices at the Site, these areas represent an area of high potential impact.

REC#11: Existing and Abandoned UST Areas

Potential Impact: Medium

Explanation: The two 1,000-gallon USTs and associated dispenser pumps appear to have been properly closed. Likewise, the 15,000-gallon No. 6 fuel oil UST removed from the Site appears to have been properly closed. No impacts to the Site soil or groundwater were observed during the removal of these tanks. Records pertaining to the in-place abandonment of a 10,000-gallon UST formerly used to store No. 6 fuel oil were not identified. In addition, leak detection records pertaining to the operation of an existing UST used to store No. 6 fuel oil were not available for review.

REC#12: Spills/Stains on Facility Floor/Grounds

Potential Impact: Medium

Explanation: Oily and/or stained floor conditions were observed within Buildings 2A, 3A, 7, and 51. A black stain was also noted on the asphalt east of Building 51A. The asphalt in this area appeared to be cracked and disintegrated. These conditions are indicative of past releases or spills of hazardous materials and are considered to have a medium potential impact.



REC#13: Loading Docks

Potential Impact: Medium

Explanation: There are four loading docks at the facility. The docks are used to receive hazardous materials, as well as to ship hazardous wastes, such as buffing dust. The ground levels of the docks represent areas of potential impact from releases of hazardous substances. During the Site reconnaissance, stains were observed on the asphalt in the vicinity of Loading Dock #2.

REC#14: Hazardous Material Storage Areas

Potential Impact: Medium

Explanation: There are a number of hazardous material storage areas and hazardous waste storage areas at the Site. These areas include chemical storage areas within Buildings 9, 11, and 51A.

REC#15: Electrical Transformer Areas

Potential Impact: Medium

Explanation: Two pad mounted electrical transformers were observed at the Site. Baldwin has not tested these transformers for the presence of PCBs. It is not known whether the transformers contain or formerly contained PCBs.

REC#16: Hazardous Waste Sludge Filter Press and Storage Area

Potential Impact: Low

Explanation: Because there is no release mechanism of significant concern that is associated with the dried sludge, this area represents a relatively low potential concern.

REC#17: Battery storage area

Potential Impact: Low

Explanation: During the Site reconnaissance, batteries used to power fork lifts were observed to be stored on pallets adjacent to Building 51A.

REC#18: Former Incinerator Area

Potential Impact: Low

Explanation: The area of the former incinerator is a potential area of contamination. Residual wastes were reported to be incinerated at this location. It is not known what other materials may have been incinerated at the facility.

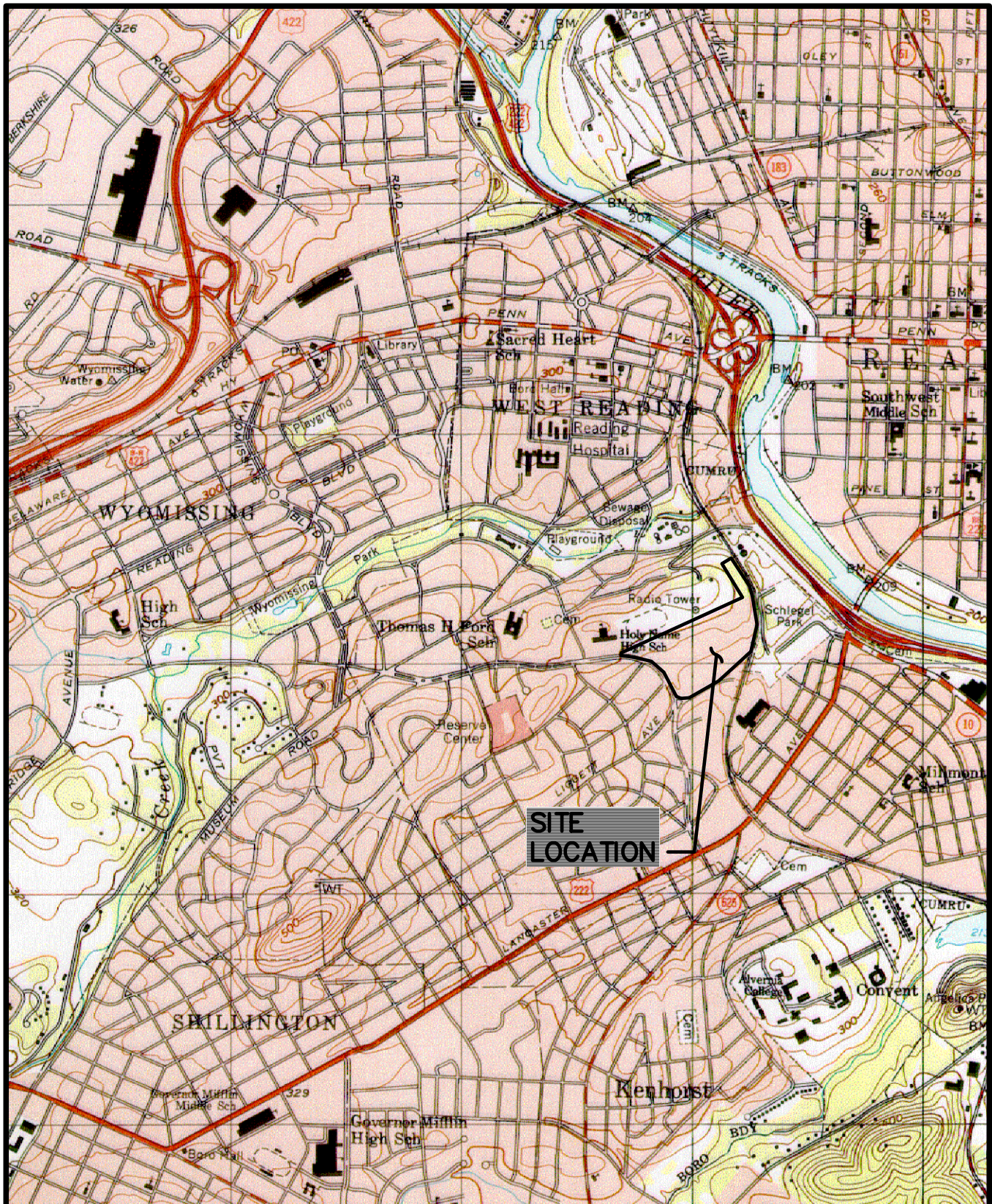


TABLES

TABLE 1
BUILDING IDENTIFICATION
Baldwin Hardware Manufacturing Corporation
841 East Wyomissing Boulevard, Reading, Pennsylvania

BUILDING NUMBER	CONSTRUCTION DATE	CURRENT USE
CENTRAL UNIT		
1	Original building occupied by Baldwin in 1956	Polishing, Machining, Work Cells
2	Original building occupied by Baldwin in 1956.	Forging Presses
3	Built prior to 1963	Vapor Degreasing, Polishing
4	Built prior to 1963	Offices
6	Built circa 1965	Machining
7	Built circa 1965	Machining, Polishing, Dedicated Andersons, Chromate Bright Dip
8	Built circa 1965	Machining, Polishing, Dedicated Anderson, Maintenance
9	Built circa 1965	Plating, Stripping
10	Built circa 1965	Polishing, Rose cell, Knob cell, Chemistry Lab
3-Story Office	Built circa 1965	Offices
1A	Built circa 1983	Inventory
2A	Built circa 1983	Forging Presses, Trimming Presses
3A	Built circa 1983	Vibratory Finishing, Auto Polishing
11	Built circa 1983	Plating, Wastewater Treatment, Chemical Storage
Boiler Room	Built circa 1983	Boilers
12	Built 1986	Levers (Forge, Trim, Machine, Polish), Lacquering, Rack Strip
LOWER UNIT		
50	Purchased in 1966 Construction date is unknown	Inventory, Tool Rooms, QC labs, Offices
51	Built circa 1983	Plating, Chemical Storage
51A	Construction date is unknown	Chemical Strip Line, Rack Stripping Ovens, Storage Tanks
Tunnel	Built circa 1968	Connects Central and Lower Units
ADMINISTRATION UNIT		
75	Built in 1962 and purchased by Baldwin in 1982	Sales, Marketing, and Engineering

FIGURES



1000 0 1000 2000 3000

SCALE IN FEET (APPROXIMATE)

MAP REFERENCE:
USGS 7.5 MINUTE SERIES QUADRANGLE
MAP FOR READING, PENNSYLVANIA
DATED 1999 SCALED 1:24000

BALDWIN HARDWARE MANUFACTURING CORP.
841 EAST WYOMISSING BOULEVARD, READING, PENNSYLVANIA

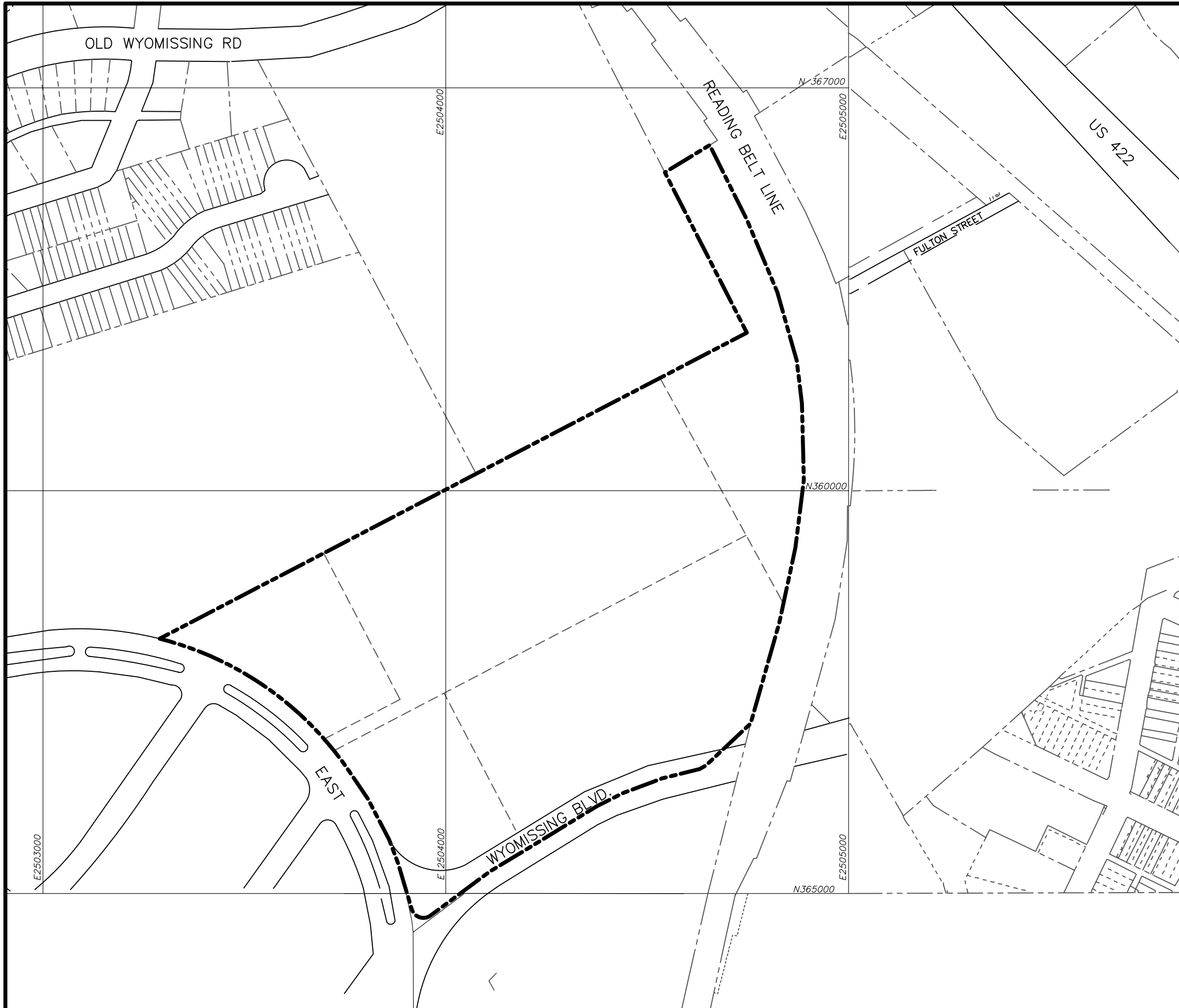
SITE LOCATION

Comm.No.

07MD304

FIGURE 1



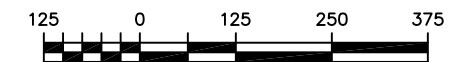


LEGEND

- INTERIOR LOT LINE
- PROPERTY LINE (ABUTTING)
- PROPERTY LINE (SITE)
- ROAD
- STREAM/BROOK

NOTE:
THIS FIGURE SHOULD BE REVIEWED IN CONJUNCTION
WITH THE ACCOMPANYING REPORT.

MAP REFERENCE:
SCANNED IMAGE DIGITIZED FROM COPY OF
PROPERTY MAP OF BERKS COUNTY, PENNSYLVANIA.
MAP NO. 530610; SCALED 1" = 250'; DATED
AUGUST 1 2002.



SCALE IN FEET (APPROXIMATE)

BALDWIN HARDWARE MANUFACTURING CORP.
841 EAST WYOMISSING BOULEVARD, READING, PENNSYLVANIA

SITE PARCEL

Comm.No.
07MD304

FIGURE 2






DRAWINGS

LEGEND:	
—————	BUILDING OUTLINE
—— — — — —	PROPERTY LINE
—— X ———	FENCE LINE
—— BT ———	STORM SEWER
○ C.C.O.	CLEAN-OUT
DS	DOWN SPOUT
⊙ MH	MANHOLE
R.C.P.	REINFORCED CONCRETE PIPE
PVC	RAIN WATER CONDUCTOR (TO BE)
—	ROOF DRAIN
S.S.	STAINLESS STEEL
?	STORM SEWER ROUTE UNCERTAIN
SA	SANITARY SEWER
—————	2 FOOT CONTOURS
-----	UNDERGROUND STORAGE TANK
⊙	MONITORING WELL
⊙	OBSERVATION WELL
⊙	PRODUCTION WELL
⊙	PIEZOMETER
AST	ABOVEGROUND STORAGE TANK
GAL.	GALLON
TCE	TRICHLOROETHYLENE
UST	UNDERGROUND STORAGE TANK
WWTP	WASTEWATER TREATMENT PLANT

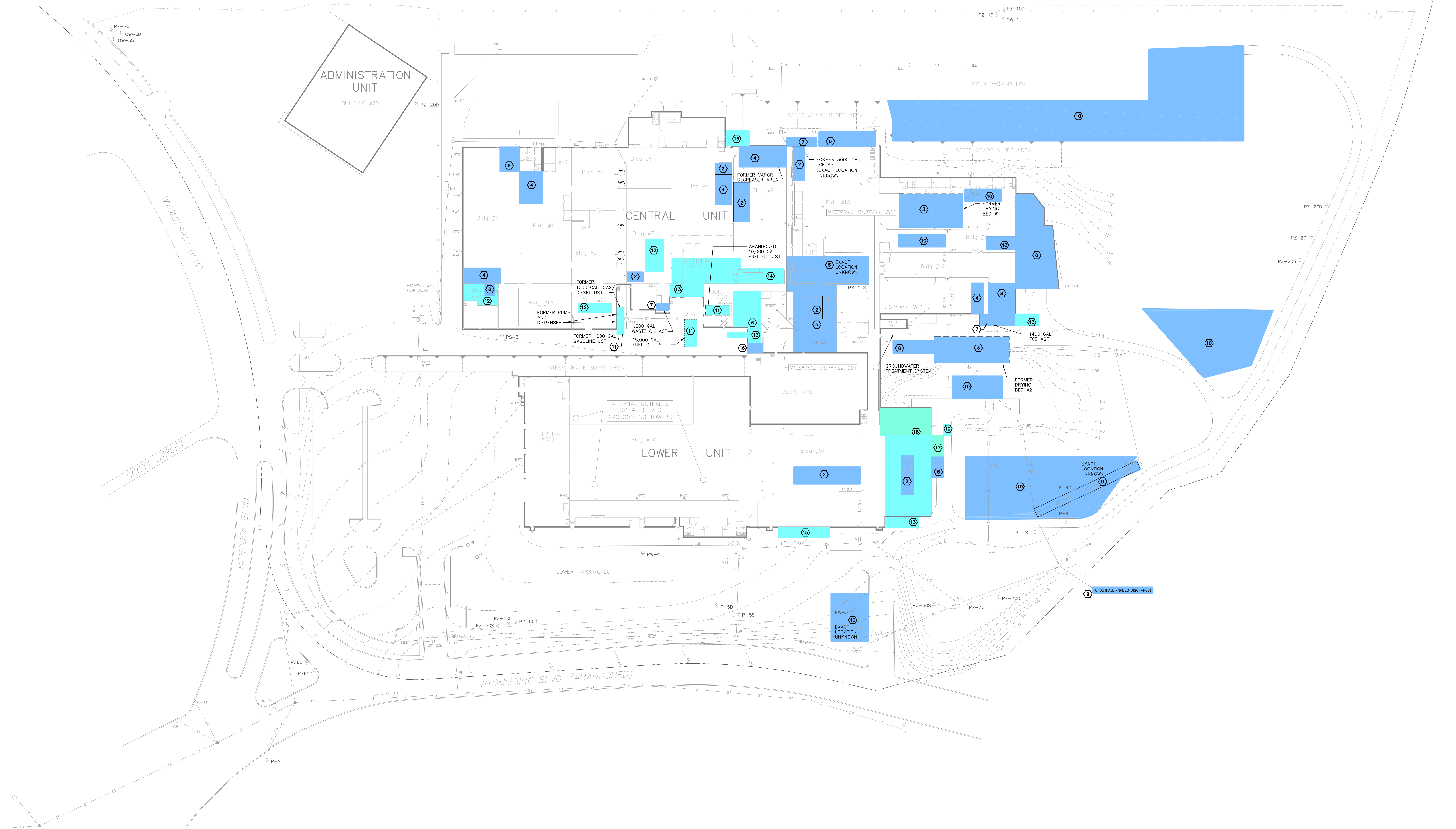
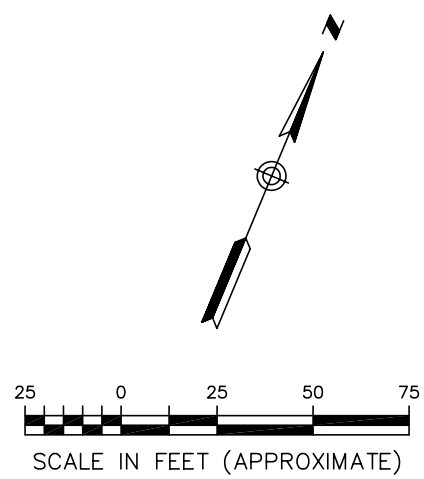
	RECOGNIZED ENVIRONMENTAL CONDITION	POTENTIAL FOR REMEDIAL RESPONSE	BUILDING/AREA
	GROUNDWATER CONTAMINATION – SITE-WIDE	HIGH	POSSIBLE MULTIPLE SOURCE AREAS
	PLATING LINES	HIGH	BUILDINGS 7, 8, 9, 10, 11, 51, AND 51A
	FORMER DRYING BEDS	HIGH	BENEATH AND SOUTH OF BUILDING 12
	FORMER AND EXISTING TCE VAPOR DEGREASERS	HIGH	BUILDINGS 1, 3, 8, 9, AND 12
	FORMER AND EXISTING WWPPT AREAS	HIGH	BUILDINGS 10 AND 11
	DUST HANDLING AND STORAGE AREAS	HIGH	BUILDINGS 1, 3, 10, 11, 12 AND 51A
	FORMER AND EXISTING AST AREAS	HIGH	BUILDINGS 7, 9/10 AND 12
	LACQUER PAINT KITCHEN	HIGH	BUILDING 12
	DISCHARGE SWALE/OUTFALL 001	HIGH	ALONG EASTERN PROPERTY LINE AND NPDES DISCHARGE POINT
	POSSIBLE HISTORIC FILL AREAS	HIGH	UPPER PARKING LOT/NORTHEAST GARAGE PARKING AREA AND PW-5 AREA
11	EXISTING AND ABANDONED UST AREAS	MEDIUM	WEST OF LOADING DOCK #2, BUILDING 2A, AND BOILER ROOM
	SPILLS/STAINS ON FACILITY FLOOR/GROUNDS	MEDIUM	ROSE AND KNOB CELL AREAS OF BUILDING #7 POUSHING COMPOUND ON FLOOR OF BUILDING 3A BLACK STAIN ON ASPHALT EAST OF BUILDING #51A STAIN ON FLOOR WITHIN FORGING AREA OF BUILDING #2A
	LOADING DOCKS	MEDIUM	BUILDINGS 8, 11, 12 AND 51A
	HAZARDOUS MATERIAL STORAGE AREAS	MEDIUM	BUILDING 9 AND 51A
	ELECTRICAL TRANSFORMER AREAS	MEDIUM	BUILDING 8/9 AND 51
16	HAZARDOUS WASTE SLUDGE FILTER PRESS AND STORAGE AREA	LOW	BUILDING 11
17	BATTERY STORAGE AREA	LOW	BUILDING 51A
18	FORMER INCINERATOR AREA	LOW	BUILDING 51A




NOTE:
THE ASTM STANDARD, DEFINES RECOGNIZED ENVIRONMENTAL CONDITIONS AS "THE PRESENCE OR LIKELY PRESENCE OF ANY HAZARDOUS SUBSTANCE OR PETROLEUM PRODUCTS ON A PROPERTY UNDER CONDITIONS THAT INDICATE AN EXISTING RELEASE, A PAST RELEASE, OR A MATERIAL THREAT OF A RELEASE OF ANY HAZARDOUS SUBSTANCES OR PETROLEUM PRODUCTS INTO STRUCTURES ON A PROPERTY OR INTO THE GROUND, GROUNDWATER, OR SURFACE WATER OF THE PROPERTY."

- | | |
|---|---|
|  | HIGH POTENTIAL FOR RECOGNIZED ENVIRONMENTAL CONDITIONS TO REQUIRE A REMEDIAL RESPONSE |
|  | MEDIUM POTENTIAL FOR RECOGNIZED ENVIRONMENTAL CONDITIONS TO REQUIRE A REMEDIAL RESPONSE |
|  | LOW POTENTIAL FOR RECOGNIZED ENVIRONMENTAL CONDITIONS TO REQUIRE A REMEDIAL RESPONSE |

MAP REFERENCES:

1. ORIGINAL BASE MAPPING TAKEN FROM ENVIRONMENTAL RESOURCES MANAGEMENT FIGURE 2-2; DATED 11-08-01; W.O. NO. E6504.00.01; TITLED "SITE PLAN WITH UTILITIES" SCALED AT 1" = 40'.
2. WELL AND PIEZOMETER LOCATIONS ARE APPROXIMATE AND ARE TAKEN FROM CRA FIGURE 3.1; TITLED "LOCATION OF WELLS AND PIEZOMETERS BALDWIN HARDWARE CORPORATION"; SCALED AT 1" = 300'.



		An Employee Owned Company																			
DRAWING		1																			
BALDWIN HARDWARE MANUFACTURING CORP. 841 EAST WYOMISSING BLVD., READING, PA						SCALE SHOWN COMM. NO. 07MD304		 Loureiro Engineering Associates, Inc. 100 Northwest Drive • Plainville, Connecticut 06062 An Employee Owned Company													
						DRAWN BY J.A.M.		DATE 08/27/03		 BLACK & DECKER® Towson, Maryland											
						APP. BY D.N.S.		DATE 08/27/03				REV.		DESCRIPTION OF REVISION		DATE		APPR.			

APPENDIX A

**Summary of Limited Phase 1 Activities
Baldwin Hardware Manufacturing Corporation
Assembly and Distribution Facility**

**225 Peach Street, North Pointe Business Center
Ontelaune Township, Pennsylvania**

Summary of Limited Phase 1 Activities
Baldwin Hardware Manufacturing Corporation - Assembly and Distribution Facility
225 Peach Street, North Pointe Business Center, Ontelaunee Township, Pennsylvania

Background

LEA performed limited Phase I activities at Baldwin's assembly and distribution center, located at 225 Peach Street, North Pointe Business Center, Ontelaunee Township, Pennsylvania. The Phase I activities were limited to a review of documents provided by Masco Corporation, and an interview with Baldwin personnel during a reconnaissance of the property. The findings of the limited Phase I activities are summarized below.

Document Review

The documents that were made available for review included: (i) a report entitled *Phase I Environmental Site Assessment*, prepared for Masco by CRA and dated February 2000; and (ii) a report entitled *Phase II Investigation*, prepared for Masco by CRA and dated March 1, 2000. The Phase I assessment was performed to identify RECs associated with prior or current use of the property. At the time of this assessment, the subject parcel consisted of approximately 52 acres of farmland. As provided in the Phase I report, the property had historically been used as an orchard and a farm, involving the use of potentially hazardous materials (agricultural chemicals). In addition, an adjacent property was identified by a DEP official due to a concern regarding possible organic groundwater contamination. The potential impact to the property from these conditions could not be assessed at the time that the Phase I assessment was performed.

Thus, a Phase II investigation was subsequently performed to assess existing "baseline" conditions and to establish whether previous use of the property resulted in impacts to soil or groundwater. As presented in the Phase II report, groundwater, surface soil, and subsurface soil samples were obtained for laboratory analysis. Based on the results, none of these media contain concentrations of organic or inorganic constituents above the applicable Pennsylvania Statewide Medium-Specific Concentrations. On this basis, it was reported that no environmental impairment of the property was apparent. No further investigative activities were recommended.

Property Reconnaissance and Key Personnel Interview

On July 8, 2003, LEA performed a reconnaissance of the subject parcel. The reconnaissance included a walkover of the assembly and distribution facility building and the surrounding



grounds. The facility is located within an industrial park in a rural area north of Reading, Pennsylvania. The facility building encompasses 255,600 square feet set on an approximate 52-acre parcel. The exterior of the building is well maintained and includes paved parking and landscaped areas. The primary outdoor activity conducted at the site involves receiving manufactured product from the manufacturing facility and distributing the product to customers. It was estimated that approximately 150 employees work at this facility.

In addition to the distribution operations, activities conducted inside the facility include some assembly of locksets, packaging, and customer service. Chemicals historically have not been used at the site. Other than batteries for forklifts, lubricants for a few machines, and maintenance supplies, no chemicals are used at this location. Wastes generated at the facility are limited to sanitary wastewater that is discharged to the local POTW, and residual wastes. The residual wastes consist primarily of paper waste and scrap metal and are tracked at the manufacturing facility.

No RECs were observed during the property reconnaissance. Based on the limited Phase I activities performed at the assembly and distribution facility, there is limited business environmental risk associated with the property.



APPENDIX B

ENVIRONMENTAL DATA RESOURCES, INC. REPORT



The EDR Radius Map with GeoCheck®

**Baldwin Hardware Manufacturing Corp.
841 Wyomissing Boulevard
Reading, PA 19611**

Inquiry Number: 01010092.1r

July 10, 2003

The Source For Environmental Risk Management Data

**3530 Post Road
Southport, Connecticut 06890**

Nationwide Customer Service

**Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com**

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	6
Orphan Summary	18
EPA Waste Codes	EPA-1
Government Records Searched/Data Currency Tracking	GR-1
 <u>GEOCHECK ADDENDUM</u>	
Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting Source Map	A-8
Physical Setting Source Map Findings	A-9
Physical Setting Source Records Searched	A-52

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc. (EDR). The report meets the government records search requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-00. Search distances are per ASTM standard or custom distances requested by the user.

TARGET PROPERTY INFORMATION

ADDRESS

841 WYOMISSING BOULEVARD
READING, PA 19611

COORDINATES

Latitude (North): 40.322070 - 40° 19' 19.5"
Longitude (West): 75.942210 - 75° 56' 32.0"
Universal Transverse Mercator: Zone 18
UTM X (Meters): 419949.7
UTM Y (Meters): 4463720.0
Elevation: 289 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property: 2440075-C8 READING, PA
Source: USGS 7.5 min quad index

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following government records. For more information on this property see page 6 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
BALDWIN HARDWARE MFG CO 841 WYOMISSING BLVD READING, PA 19610	FINDS SWF/LF RCRIS-LQG TRIS RAATS CORRACTS CERC-NFRAP	19611BLDWN84
BALDWIN HDWR 841 E WYOMISSING BLVD READING, PA 19611	AST	N/A
BALDWIN HDWR 841 E WYOMISSING BLVD READING, PA 19612	AST	N/A
BALDWIN HARDWARE MFG CO INCINERATOR 841 WYOMISSING BLVD READING, PA 19603	SWF/LF	N/A

EXECUTIVE SUMMARY

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the ASTM E 1527-00 search radius around the target property for the following databases:

FEDERAL ASTM STANDARD

NPL..... National Priority List
Proposed NPL..... Proposed National Priority List Sites
CERCLIS..... Comprehensive Environmental Response, Compensation, and Liability Information System
RCRIS-TSD..... Resource Conservation and Recovery Information System
RCRIS-SQG..... Resource Conservation and Recovery Information System
ERNS..... Emergency Response Notification System

STATE ASTM STANDARD

SHWS..... Hazardous Sites Cleanup Act Site List
UST..... Listing of Pennsylvania Regulated Underground Storage Tanks

FEDERAL ASTM SUPPLEMENTAL

CONSENT..... Superfund (CERCLA) Consent Decrees
ROD..... Records Of Decision
Delisted NPL..... National Priority List Deletions
HMIRS..... Hazardous Materials Information Reporting System
MLTS..... Material Licensing Tracking System
MINES..... Mines Master Index File
NPL Liens..... Federal Superfund Liens
PADS..... PCB Activity Database System
DOD..... Department of Defense Sites
TSCA..... Toxic Substances Control Act
SSTS..... Section 7 Tracking Systems
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

STATE OR LOCAL ASTM SUPPLEMENTAL

LAST..... Storage Tank Release Sites
ACT 2-DEED..... Act 2-Deed Acknowledgment Sites

BROWNFIELDS DATABASES

Inst Control..... Engineering and Institutional Controls at Act 2 Sites

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

EXECUTIVE SUMMARY

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. EDR's definition of a site with an elevation equal to the target property includes a tolerance of +/- 10 feet. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property (by more than 10 feet). Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

FEDERAL ASTM STANDARD

RCRIS: The Resource Conservation and Recovery Act database includes selected information on sites that generate, store, treat, or dispose of hazardous waste as defined by the Act. The source of this database is the U.S. EPA.

A review of the RCRIS-LQG list, as provided by EDR, and dated 05/09/2003 has revealed that there is 1 RCRIS-LQG site within approximately 0.25 miles of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<i>READING BODYWORKS INC</i>	<i>HANCOCK BLVD & GERRY ST</i>	<i>1/8 - 1/4 S</i>	<i>6</i>	<i>13</i>

STATE ASTM STANDARD

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Environmental Resources' List of Confirmed Releases.

A review of the LUST list, as provided by EDR, and dated 04/11/2003 has revealed that there are 6 LUST sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
OAKBROOK PROJ	500 MCCLELLAN ST	1/8 - 1/4 SW	5	13
<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<i>INTERSTATE CONTAINER</i>	<i>GRACE & MEADE STREETS</i>	<i>1/4 - 1/2 ESE</i>	<i>7</i>	<i>14</i>
ROLAND HUGHES TEXACO	231 LANCASTER AVE	1/4 - 1/2 E	8	16
G & G CLASSICS INC	800 LANCASTER AVE	1/4 - 1/2 SSE	B9	16
DECARLOS AUTO SALES	101 LANCASTER AVE	1/4 - 1/2 ENE	10	16
<i>READING READY MIX PLT</i>	<i>810 NEW HOLLAND RD</i>	<i>1/4 - 1/2 SSE</i>	<i>B12</i>	<i>17</i>

VCP: Voluntary Cleanup Program Sites List.

A review of the VCP list, as provided by EDR, and dated 05/09/2003 has revealed that there is 1 VCP site within approximately 0.5 miles of the target property.

EXECUTIVE SUMMARY

<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<i>EASTERN IND</i>	<i>810 NEW HOLLAND RD</i>	<i>1/4 - 1/2SSE</i>	<i>B11</i>	<i>16</i>

PROPRIETARY DATABASES

Former Manufactured Gas (Coal Gas) Sites:

The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative

A review of the Coal Gas list, as provided by EDR, has revealed that there are 2 Coal Gas sites within approximately 1 mile of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
CONSUMERS GAS CO.	460 CANAL	1/2 - 1 ENE	13	17
READING TANNERY	210 CHESTNUT	1/2 - 1 NE	14	17

BROWNFIELDS DATABASES

VCP: Voluntary Cleanup Program Sites List.

A review of the VCP list, as provided by EDR, and dated 05/09/2003 has revealed that there is 1 VCP site within approximately 0.5 miles of the target property.

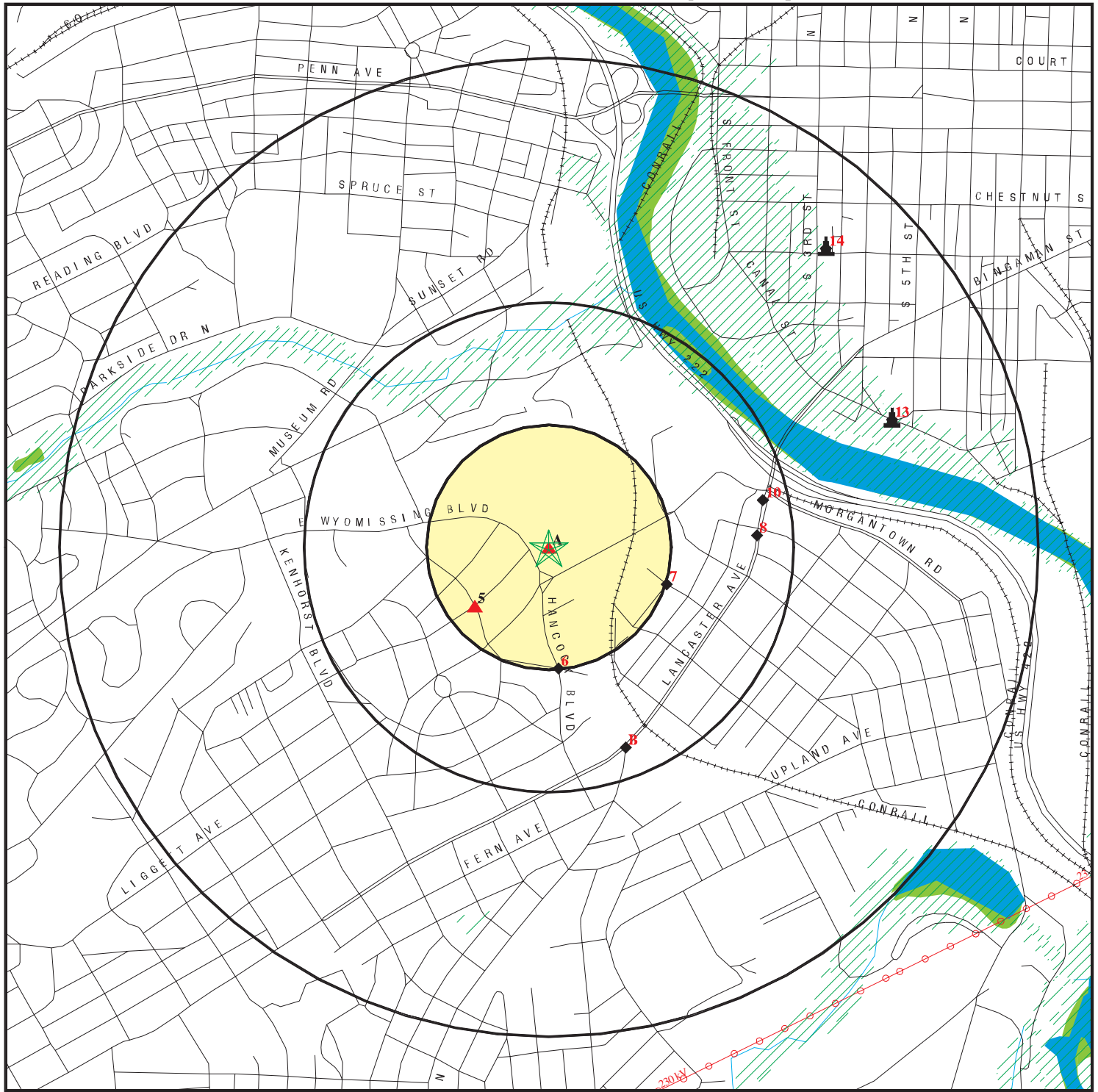
<u>Lower Elevation</u>	<u>Address</u>	<u>Dist / Dir</u>	<u>Map ID</u>	<u>Page</u>
<i>EASTERN IND</i>	<i>810 NEW HOLLAND RD</i>	<i>1/4 - 1/2SSE</i>	<i>B11</i>	<i>16</i>

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped:

<u>Site Name</u>	<u>Database(s)</u>
STAGECOACH STOP RESTAURANT	LUST
READING TUBE PLT 2	LUST
READING TUBE PLT 4	LUST
FAIRGROUND SQUARE MALL	LUST

OVERVIEW MAP - 01010092.1r - Loureiro Engineering Assoc. PC



★ Target Property

▲ Sites at elevations higher than or equal to the target property

◆ Sites at elevations lower than the target property

▲ Coal Gasification Sites

■ National Priority List Sites

■ Landfill Sites

■ Dept. Defense Sites

⚡ Power transmission lines

⚡ Oil & Gas pipelines

▨ 100-year flood zone

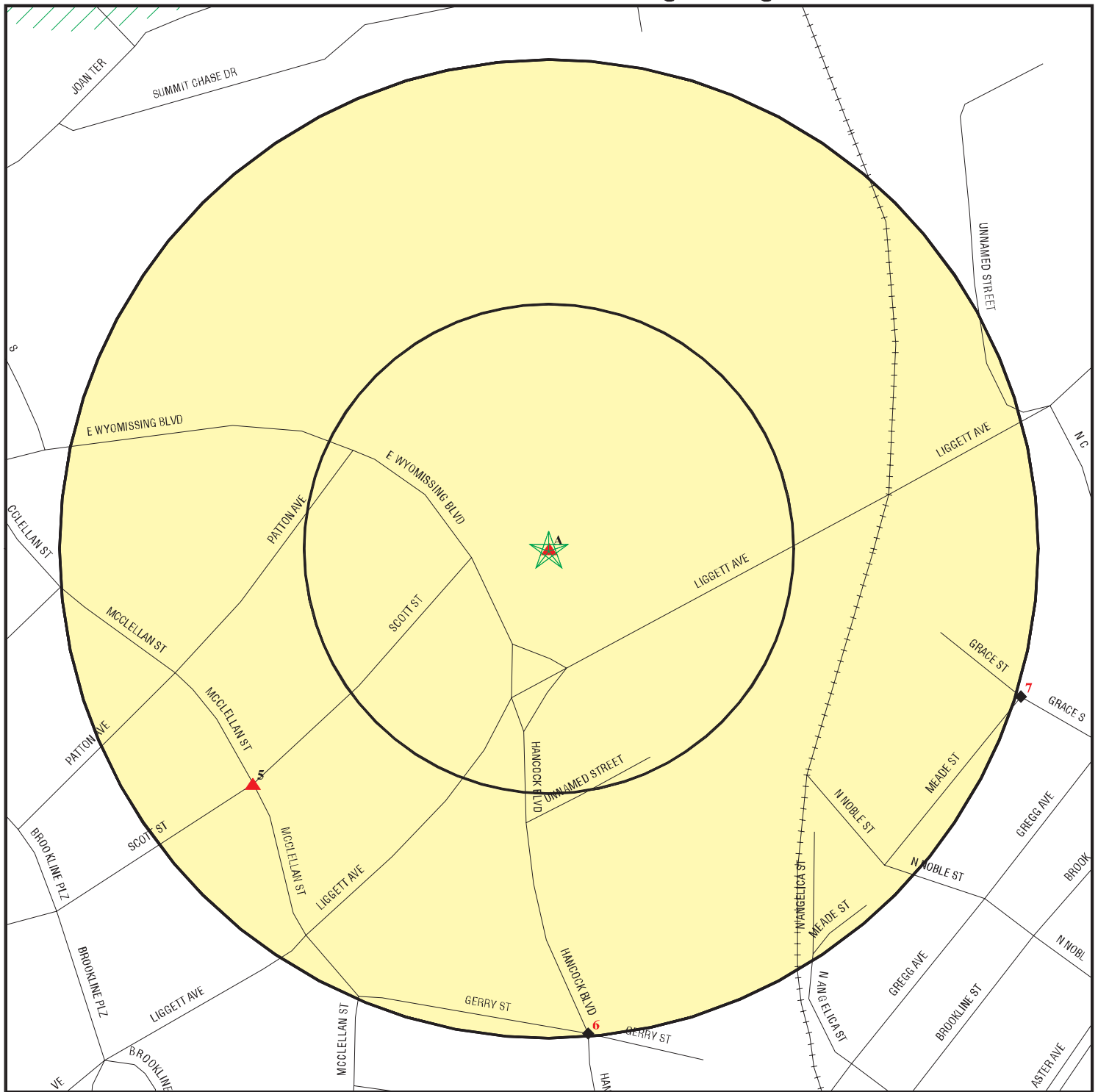
▨ 500-year flood zone

■ Federal Wetlands

TARGET PROPERTY: Baldwin Hardware Manufacturing Corp.
 ADDRESS: 841 Wyomissing Boulevard
 CITY/STATE/ZIP: Reading PA 19611
 LAT/LONG: 40.3221 / 75.9422

CUSTOMER: Loureiro Engineering Assoc. PC
 CONTACT: David N. Scotti
 INQUIRY #: 01010092.1r
 DATE: July 10, 2003 12:20 pm

DETAIL MAP - 01010092.1r - Loureiro Engineering Assoc. PC



- ★ Target Property
- ▲ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- ⚡ Coal Gasification Sites
- ⚡ Sensitive Receptors
- ⚡ National Priority List Sites
- ⚡ Landfill Sites
- ⚡ Dept. Defense Sites

- ⚡ Oil & Gas pipelines
- ▨ 100-year flood zone
- ▨ 500-year flood zone

0 1/16 1/8 1/4 Miles



TARGET PROPERTY: Baldwin Hardware Manufacturing Corp.
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CUSTOMER: Loureiro Engineering Assoc. PC
CONTACT: David N. Scotti
INQUIRY #: 01010092.1r
DATE: July 10, 2003 12:20 pm

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<u>FEDERAL ASTM STANDARD</u>								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
CERCLIS		0.500	0	0	0	NR	NR	0
CERC-NFRAP	X	0.250	0	0	NR	NR	NR	0
CORRACTS	X	1.000	0	0	0	0	NR	0
RCRIS-TSD		0.500	0	0	0	NR	NR	0
RCRIS Lg. Quan. Gen.	X	0.250	0	1	NR	NR	NR	1
RCRIS Sm. Quan. Gen.		0.250	0	0	NR	NR	NR	0
ERNS		TP	NR	NR	NR	NR	NR	0
<u>STATE ASTM STANDARD</u>								
State Haz. Waste		1.000	0	0	0	0	NR	0
State Landfill	X	0.500	0	0	0	NR	NR	0
LUST		0.500	0	1	5	NR	NR	6
UST		0.250	0	0	NR	NR	NR	0
VCP		0.500	0	0	1	NR	NR	1
<u>FEDERAL ASTM SUPPLEMENTAL</u>								
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
Delisted NPL		1.000	0	0	0	0	NR	0
FINDS	X	TP	NR	NR	NR	NR	NR	0
HMIRS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
NPL Liens		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
RAATS	X	TP	NR	NR	NR	NR	NR	0
TRIS	X	TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
SSTS		TP	NR	NR	NR	NR	NR	0
FTTS		TP	NR	NR	NR	NR	NR	0
<u>STATE OR LOCAL ASTM SUPPLEMENTAL</u>								
AST	X	TP	NR	NR	NR	NR	NR	0
LAST		TP	NR	NR	NR	NR	NR	0
ACT 2-DEED		TP	NR	NR	NR	NR	NR	0
<u>EDR PROPRIETARY HISTORICAL DATABASES</u>								
Coal Gas		1.000	0	0	0	2	NR	2
<u>BROWNFIELDS DATABASES</u>								
Inst Control		0.250	0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

<u>Database</u>	<u>Target Property</u>	<u>Search Distance (Miles)</u>	<u>< 1/8</u>	<u>1/8 - 1/4</u>	<u>1/4 - 1/2</u>	<u>1/2 - 1</u>	<u>> 1</u>	<u>Total Plotted</u>
VCP		0.500	0	0	1	NR	NR	1

NOTES:

AQUIFLOW - see EDR Physical Setting Source Addendum

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

A1
Target
Property

BALDWIN HARDWARE MFG CO
841 WYOMISSING BLVD
READING, PA 19610

FINDS
SWF/LF
RCRIS-LQG
TRIS
RAATS
CORRACTS
CERC-NFRAP

EDR ID Number
EPA ID Number

1000193489
19611BLDWN84

Actual:
291 ft.

Site 1 of 4 in cluster A

CERCLIS-NFRAP Classification Data:

Site Incident Category: Not reported
Non NPL Code: NFRAP
Ownership Status: Other

Federal Facility: Not a Federal Facility

NPL Status: Not on the NPL

CERCLIS-NFRAP Assessment History:

Assessment: SITE INSPECTION
Assessment: DISCOVERY
Assessment: ARCHIVE SITE
Assessment: PRELIMINARY ASSESSMENT

Completed: 07/01/1981
Completed: 07/01/1981
Completed: 04/01/1982
Completed: 04/01/1982

CERCLIS-NFRAP Alias Name(s):

BALDWIN HARDWARE MFG CO

CORRACTS Data:

EPA Id: PAD002350833
Region: 3
State: PA
Area Name: ENTIRE FACILITY
Original Scheduled Date: Not reported
New Scheduled Date: 10/01/1991
Actual Date: Not reported
Corrective Action: CA075LO - CA Prioritization, Facility or area was assigned a low corrective action priority

EPA Id: PAD002350833
Region: 3
State: PA
Area Name: ENTIRE FACILITY
Original Scheduled Date: 4/1/1987
New Scheduled Date: 04/01/1987
Actual Date: Not reported
Corrective Action: CA070YE - RFA Determination Of Need For An RFI, RFI is Necessary

EPA Id: PAD002350833
Region: 3
State: PA
Area Name: ENTIRE FACILITY
Original Scheduled Date: Not reported
New Scheduled Date: 08/11/1995
Actual Date: Not reported
Corrective Action: CA750YE - Migration of Contaminated Groundwater under Control , Yes, Migration of Contaminated Groundwater Under Control has been verified

EPA Id: PAD002350833
Region: 3
State: PA
Area Name: ENTIRE FACILITY
Original Scheduled Date: Not reported
New Scheduled Date: 06/15/1992
Actual Date: Not reported
Corrective Action: CA225YE - Stabilization Measures Evaluation, This facility ,is amenable to stabilization activity based on the,status of corrective action work at the

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

BALDWIN HARDWARE MFG CO (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000193489

facility, technical factors, the degree of risk, timing considerations and administrative considerations

EPA Id: PAD002350833
Region: 3
State: PA
Area Name: GROUNDWATER
Original Scheduled Date: Not reported
New Scheduled Date: 05/20/1984
Actual Date: Not reported
Corrective Action: CA300 - CMS Workplan Approved

The CORRACTS database contains 7 additional records for this site.
Please contact your EDR Account Executive for more information.

RCRIS Corrective Action Summary:

Event: Current Human Exposures under Control, Yes, Current Human Exposures Under Control has been verified. Based on a review of information contained in the EI determination, current human exposures are expected to be under control at the facility under current and reasonably expected conditions. This determination will be re-evaluated when the Agency/State becomes aware of significant changes at the facility.

Event Date: 08/11/1995

Event: Igration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified. Based on a review of information contained in the EI determination, it has been determined that migration of contaminated groundwater is under control at the facility. Specifically, this determination indicates that the migration of contaminated groundwater is under control, and that monitoring will be conducted to confirm that contaminated groundwater remains within the existing area of contaminated groundwater. This determination will be re-evaluated when the Agency becomes aware of significant changes at the facility.

Event Date: 08/11/1995

Event: Stabilization Measures Evaluation, This facility is amenable to stabilization activity based on the status of corrective action work at the facility, technical factors, the degree of risk, timing considerations and administrative considerations.

Event Date: 06/15/1992

Event: CA Prioritization, Facility or area was assigned a low corrective action priority.

Event Date: 10/01/1991

Event: RFA Determination Of Need For An RFI, RFI is Necessary;

Event Date: 04/01/1987

Event: RFI Imposition

Event Date: 04/01/1987

Event: RFA Completed

Event Date: 11/01/1984

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

BALDWIN HARDWARE MFG CO (Continued)

EDR ID Number
EPA ID Number

1000193489

Event: Date For Remedy Selection (CM Imposed)
Event Date: 11/01/1984

Event: CMS Approved
Event Date: 11/01/1984

Event: RFI Approved
Event Date: 11/01/1984

Event: RFI Workplan Approved
Event Date: 05/20/1984

Event: CMS Workplan Approved
Event Date: 05/20/1984

RCRIS:

Owner: BALDWIN HARDWARE MANUFACTURING CORP
(215) 777-7811
EPA ID: PAD002350833
Contact: JOHN BLEWETT
(215) 777-7811

Classification: Large Quantity Generator
TSDF Activities: Not reported

BIENNIAL REPORTS:

Last Biennial Reporting Year: 1999

<u>Waste</u>	<u>Quantity (Lbs)</u>	<u>Waste</u>	<u>Quantity (Lbs)</u>
D001	22838.00	D002	599591.00
D003	8188400.00	D004	5369.00
D005	5369.00	D007	18331195.00
D008	1927833.00	D038	5369.00
D040	248009.00	F001	208443.00
F003	15005.00	F005	20374.00
F006	393080.00	P105	2.00

Violation Status: Violations exist

Regulation Violated: 40cfr262.34(c)(1)
Area of Violation: GENERATOR-OTHER REQUIREMENTS
Date Violation Determined: 09/09/2002
Actual Date Achieved Compliance: 09/23/2002

Regulation Violated: 25PAcode265a.173(3)
Area of Violation: GENERATOR-OTHER REQUIREMENTS
Date Violation Determined: 09/09/2002
Actual Date Achieved Compliance: 09/23/2002

Regulation Violated: 40cfr262.34(a)
Area of Violation: GENERATOR-OTHER REQUIREMENTS
Date Violation Determined: 09/09/2002
Actual Date Achieved Compliance: 09/23/2002

Regulation Violated: 40 cfr 264.15d
Area of Violation: GENERATOR-OTHER REQUIREMENTS
Date Violation Determined: 01/28/2002
Actual Date Achieved Compliance: 09/09/2002

Regulation Violated: 40 cfr 264.54
Area of Violation: GENERATOR-OTHER REQUIREMENTS
Date Violation Determined: 01/28/2002
Actual Date Achieved Compliance: 09/09/2002

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

BALDWIN HARDWARE MFG CO (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000193489

Regulation Violated:	40 cfr 164.16(c)
Area of Violation:	GENERATOR-OTHER REQUIREMENTS
Date Violation Determined:	01/28/2002
Actual Date Achieved Compliance:	09/09/2002
Regulation Violated:	25PAcode262a.20(1)and(4)
Area of Violation:	GENERATOR-MANIFEST REQUIREMENTS
Date Violation Determined:	03/01/2001
Actual Date Achieved Compliance:	03/01/2001
Enforcement Action:	WRITTEN INFORMAL
Enforcement Action Date:	04/12/2001
Penalty Type:	Not reported
Enforcement Action:	FINAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date:	07/24/2001
Penalty Type:	Not reported
Regulation Violated:	40 CFR 262.41
Area of Violation:	GENERATOR-GENERAL REQUIREMENTS
Date Violation Determined:	05/30/2000
Actual Date Achieved Compliance:	06/19/2000
Regulation Violated:	262.42(a)
Area of Violation:	GENERATOR-MANIFEST REQUIREMENTS
Date Violation Determined:	03/31/1995
Actual Date Achieved Compliance:	04/19/1995
Regulation Violated:	262.30(a)(2)(3),262.34(a)(2)(3
Area of Violation:	GENERATOR-PRE-TRANSPORT REQUIREMENTS
Date Violation Determined:	03/29/1995
Actual Date Achieved Compliance:	04/19/1995
Regulation Violated:	25 PA CODE CHAPT.264.15(e)
Area of Violation:	GENERATOR-OTHER REQUIREMENTS
Date Violation Determined:	04/22/1994
Actual Date Achieved Compliance:	08/03/1994
Enforcement Action:	WRITTEN INFORMAL
Enforcement Action Date:	05/27/1994
Penalty Type:	Not reported
Regulation Violated:	262.41
Area of Violation:	GENERATOR-RECORDKEEPING REQUIREMENTS
Date Violation Determined:	03/20/1992
Actual Date Achieved Compliance:	06/03/1993
Enforcement Action:	FINAL 3008(H) I.S. CA ORDERS (NON-HSWA)
Enforcement Action Date:	04/13/1987
Penalty Type:	Final Monetary Penalty
Enforcement Action:	WRITTEN INFORMAL
Enforcement Action Date:	03/26/1992
Penalty Type:	Final Monetary Penalty
Enforcement Action:	FINAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date:	10/28/1993
Penalty Type:	Final Monetary Penalty
Regulation Violated:	Not reported
Area of Violation:	TSD-OTHER REQUIREMENTS (OVERSIGHT)
Date Violation Determined:	08/01/1991
Actual Date Achieved Compliance:	06/03/1993

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

BALDWIN HARDWARE MFG CO (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000193489

Enforcement Action:	WRITTEN INFORMAL
Enforcement Action Date:	08/12/1991
Penalty Type:	Not reported
Regulation Violated:	Not reported
Area of Violation:	TSD-OTHER REQUIREMENTS (OVERSIGHT)
Date Violation Determined:	04/12/1990
Actual Date Achieved Compliance:	09/13/1990
Enforcement Action:	WRITTEN INFORMAL
Enforcement Action Date:	04/23/1990
Penalty Type:	Not reported
Regulation Violated:	Not reported
Area of Violation:	TSD-OTHER REQUIREMENTS (OVERSIGHT)
Date Violation Determined:	04/12/1990
Actual Date Achieved Compliance:	09/13/1990
Enforcement Action:	WRITTEN INFORMAL
Enforcement Action Date:	04/23/1990
Penalty Type:	Not reported
Regulation Violated:	Not reported
Area of Violation:	TSD-GOUNDWATER MONITORING REQUIREMENTS
Date Violation Determined:	09/22/1988
Actual Date Achieved Compliance:	06/12/1990
Enforcement Action:	WRITTEN INFORMAL
Enforcement Action Date:	09/22/1988
Penalty Type:	Not reported
Regulation Violated:	Not reported
Area of Violation:	TSD-GOUNDWATER MONITORING REQUIREMENTS
Date Violation Determined:	03/28/1986
Actual Date Achieved Compliance:	Not reported
Enforcement Action:	FINAL 3008(H) I.S. CA ORDERS (NON-HSWA)
Enforcement Action Date:	04/13/1987
Penalty Type:	Final Monetary Penalty
Enforcement Action:	WRITTEN INFORMAL
Enforcement Action Date:	03/26/1992
Penalty Type:	Final Monetary Penalty
Enforcement Action:	FINAL 3008(A) COMPLIANCE ORDER
Enforcement Action Date:	10/28/1993
Penalty Type:	Final Monetary Penalty

There are 17 violation record(s) reported at this site:

<u>Evaluation</u>	<u>Area of Violation</u>	<u>Date of Compliance</u>
Compliance Evaluation Inspection	GENERATOR-OTHER REQUIREMENTS	20020923
	GENERATOR-OTHER REQUIREMENTS	20020923
	GENERATOR-OTHER REQUIREMENTS	20020923
Compliance Evaluation Inspection	GENERATOR-OTHER REQUIREMENTS	20020909
	GENERATOR-OTHER REQUIREMENTS	20020909
	GENERATOR-OTHER REQUIREMENTS	20020909
Non-Financial Record Review	GENERATOR-MANIFEST REQUIREMENTS	20010301
Compliance Evaluation Inspection	GENERATOR-GENERAL REQUIREMENTS	20000619
Compliance Evaluation Inspection	GENERATOR-PRE-TRANSPORT REQUIREMENTS	19950419
	GENERATOR-MANIFEST REQUIREMENTS	19950419
Compliance Evaluation Inspection	GENERATOR-OTHER REQUIREMENTS	19940803

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

BALDWIN HARDWARE MFG CO (Continued)

1000193489

Compliance Evaluation Inspection	GENERATOR-RECORDKEEPING REQUIREMENTS	19930603
Compliance Evaluation Inspection	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19930603
Compliance Evaluation Inspection	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19900913
	TSD-OTHER REQUIREMENTS (OVERSIGHT)	19900913
Compliance GW Monitoring Evaluation	TSD-GOUNDWATER MONITORING REQUIREMENTS	19900612
Non-Financial Record Review	TSD-GOUNDWATER MONITORING REQUIREMENTS	

NY MANIFEST

Additional detail is available in NY MANIFEST. Please contact your EDR Account Executive for more information.

CT MANIFEST

Additional detail is available in CT MANIFEST. Please contact your EDR Account Executive for more information.

FINDS:

Other Pertinent Environmental Activity Identified at Site:

- AIRS Facility System (AIRS/AFS)
- Biennial Reporting System (BRS)
- Facility Registry System (FRS)
- ICIS
- National Emissions Trends (NET)
- National Toxics Inventory (NTI)
- Pennsylvania Environment, Facility, Application, Compliance Tracking System (PA-EFACTS)
- Permit Compliance System (PCS)
- Resource Conservation and Recovery Act Information system (RCRAINFO)
- Toxic Chemical Release Inventory System (TRIS)

SWF/LF:

Landfill Facility ID: 400478
Last Inspection Date: 03/03/92
Facility Type: MUNICIPAL INCINERATOR
Operational Status: PRIVATE
Email Address: Not reported
Permit Suspended: Not reported
Permit: Not reported
Region: LF
Flag: Not reported
Permit Acres: Not reported
Contact Id: Not reported
Contact Person: Not reported
Contact Phone: Not reported
Township: Not reported

A2 **BALDWIN HDWR**
Target **841 E WYOMISSING BLVD**
Property **READING, PA 19611**

AST **A100164333**
N/A

Site 2 of 4 in cluster A

Actual:
291 ft.

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

BALDWIN HDWR (Continued)

EDR ID Number
EPA ID Number

Database(s)

A100164333

AST:

Facility ID: 06-37850
Owner ID: 10802
Owner: BRENN TAG NORTHEAST INC
Owner Address: ROUTE 61 & HULLER LN
PO BOX 13788
READING, PA 19612
Owner Phone: 6109264151
Tank ID: 153549
Tank Sequence Number: 001A
Tank Status: CURRENTLY IN USE
Date Installed: 11/01/1999
Chemical: HAZARDOUS SUBSTANCE
Tank Capacity: 800

**A3
Target
Property**

**BALDWIN HDWR
841 E WYOMISSING BLVD
READING, PA 19612**

**AST U001960978
N/A**

Site 3 of 4 in cluster A

**Actual:
291 ft.**

AST:

Facility ID: 06-14219
Owner ID: 2709
Owner: BALDWIN HDWR CORP
Owner Address: 841 E WYOMISSING BLVD
BOX 15048
READING, PA 19612
Owner Phone: 6107777811
Tank ID: 8252
Tank Sequence Number: 001A
Tank Status: CURRENTLY IN USE
Date Installed: 06/01/1986
Chemical: HAZARDOUS SUBSTANCE
Tank Capacity: 1400

**A4
Target
Property**

**BALDWIN HARDWARE MFG CO INCINERATOR
841 WYOMISSING BLVD
READING, PA 19603**

**SWF/LF S102045875
N/A**

Site 4 of 4 in cluster A

**Actual:
291 ft.**

SWF/LF:

Landfill Facility ID: 300593
Last Inspection Date: Not reported
Facility Type: RESIDENTIAL INCINERATOR
Operational Status: PRIVATE
Email Address: Not reported
Permit Suspended: Not reported
Permit: Not reported
Region: LF
Flag: Not reported
Permit Acres: Not reported
Contact Id: Not reported
Contact Person: Not reported
Contact Phone: Not reported
Township: Not reported

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

BALDWIN HARDWARE MFG CO INCINERATOR (Continued)

EDR ID Number
EPA ID Number

Database(s)

S102045875

5
SW
1/8-1/4
1018 ft.

OAKBROOK PROJ
500 MCCLELLAN ST
READING, PA

LUST **S101473337**
N/A

Relative:
Higher

LUST:

Actual:
311 ft.

Facility Id: 06-61660
Facility Type: Underground Storage Tank Containing Petroleum
Facility Status: Interim Remedial Actions Initiated or Completed
Status Date: Not reported
Description : OAKBROOK PROJ
Release Date: 5-Aug-89
Region: SC - 3

6
South
1/8-1/4
1311 ft.

READING BODYWORKS INC
HANCOCK BLVD & GERRY ST
READING, PA 19603

FINDS **1000189442**
RCRIS-LQG **19551RDNGLPO**
TRIS

Relative:
Lower

RCRIS:

Actual:
280 ft.

Owner: IRVING SUKNOW
(215) 555-1212
EPA ID: PAD002338143
Contact: RUSS ROSER
(215) 775-3301
Classification: Large Quantity Generator
TSDF Activities: Not reported

BIENNIAL REPORTS:

Last Biennial Reporting Year: 1999

<u>Waste</u>	<u>Quantity (Lbs)</u>	<u>Waste</u>	<u>Quantity (Lbs)</u>
D001	15596.00	D035	39346.00

Violation Status: Violations exist

Regulation Violated:	CHPT 262.34(a)(3),265.178
Area of Violation:	GENERATOR-PRE-TRANSPORT REQUIREMENTS
Date Violation Determined:	05/05/1995
Actual Date Achieved Compliance:	05/10/1995
Regulation Violated:	CHPT 262.34(a)(3),265.174
Area of Violation:	GENERATOR-PRE-TRANSPORT REQUIREMENTS
Date Violation Determined:	05/05/1995
Actual Date Achieved Compliance:	05/10/1995

There are 2 violation record(s) reported at this site:

<u>Evaluation</u>	<u>Area of Violation</u>	<u>Date of Compliance</u>
Compliance Evaluation Inspection	GENERATOR-PRE-TRANSPORT REQUIREMENTS	19950510
	GENERATOR-PRE-TRANSPORT REQUIREMENTS	19950510

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

READING BODYWORKS INC (Continued)

EDR ID Number
EPA ID Number

Database(s)

1000189442

FINDS:

Other Pertinent Environmental Activity Identified at Site:

AIRS Facility System (AIRS/AFS)
Biennial Reporting System (BRS)
Facility Registry System (FRS)
ICIS
National Compliance Database (NCDB)
National Emissions Trends (NET)
National Toxics Inventory (NTI)
Pennsylvania Environment, Facility, Application, Compliance Tracking System (PA-EFACTS)
Resource Conservation and Recovery Act Information system (RCRAINFO)
Toxic Chemical Release Inventory System (TRIS)

**7
ESE
1/4-1/2
1334 ft.**

**INTERSTATE CONTAINER
GRACE & MEADE STREETS
READING, PA 19603**

**RCRIS-SQG
FINDS
LUST
AST**

**1000218911
PAD071189492**

**Relative:
Lower**

RCRIS:

Owner: INDEVCO - BEIRUT LEBANON
(215) 555-1212
EPA ID: PAD071189492
Contact: MEL BROWN
(215) 376-7123

**Actual:
245 ft.**

Classification: Small Quantity Generator
TSD Activities: Not reported

Violation Status: No violations found

FINDS:

Other Pertinent Environmental Activity Identified at Site:

AIRS Facility System (AIRS/AFS)
Facility Registry System (FRS)
Pennsylvania Environment, Facility, Application, Compliance Tracking System (PA-EFACTS)
Resource Conservation and Recovery Act Information system (RCRAINFO)

LUST:

Facility Id: 06-37418
Facility Type: Underground Storage Tank Containing Haz Substances
Facility Status: Interim Remedial Actions Initiated or Completed
Status Date: 15-Dec-86
Description : INTERSTATE CONTAINER CORP
Release Date: 15-Nov-86
Region: SC - 3

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

INTERSTATE CONTAINER (Continued)

1000218911

AST:

Facility ID: 06-41748
Owner ID: 11552
Owner: INTERSTATE RESOURCES
Owner Address: 1800 N KENT ST STE 1200
ROSSLYN, VA 22209
Owner Phone: 7032433355
Tank ID: 64329
Tank Sequence Number: 001A
Tank Status: CURRENTLY IN USE
Date Installed: 00/00/0000
Chemical: KEROSENE
Tank Capacity: 400

Facility ID: 06-41748
Owner ID: 11552
Owner: INTERSTATE RESOURCES
Owner Address: 1800 N KENT ST STE 1200
ROSSLYN, VA 22209
Owner Phone: 7032433355
Tank ID: 64330
Tank Sequence Number: 002A
Tank Status: CURRENTLY IN USE
Date Installed: 00/00/0000
Chemical: HAZARDOUS SUBSTANCE
Tank Capacity: 5000

Facility ID: 06-41748
Owner ID: 11552
Owner: INTERSTATE RESOURCES
Owner Address: 1800 N KENT ST STE 1200
ROSSLYN, VA 22209
Owner Phone: 7032433355
Tank ID: 64331
Tank Sequence Number: 003A
Tank Status: CURRENTLY IN USE
Date Installed: 12/01/1989
Chemical: HEATING OIL
Tank Capacity: 4000

Facility ID: 06-41748
Owner ID: 11552
Owner: INTERSTATE RESOURCES
Owner Address: 1800 N KENT ST STE 1200
ROSSLYN, VA 22209
Owner Phone: 7032433355
Tank ID: 64332
Tank Sequence Number: 004A
Tank Status: CURRENTLY IN USE
Date Installed: 11/01/1989
Chemical: HEATING OIL
Tank Capacity: 2000

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

	Site	Database(s)	EDR ID Number EPA ID Number
8 East 1/4-1/2 2251 ft.	ROLAND HUGHES TEXACO 231 LANCASTER AVE READING, PA	LUST	S103473421 N/A
Relative: Lower	LUST: Facility Id: 06-23176 Facility Type: Underground Storage Tank Containing Petroleum Facility Status: Interim Remedial Actions Initiated or Completed Status Date: 18-May-99 Description : RICHARD HUGHES TEXACO tanks 1 thru 4 Release Date: 29-Oct-98 Region: SC - 3		
Actual: 234 ft.			
B9 SSE 1/4-1/2 2315 ft.	G & G CLASSICS INC 800 LANCASTER AVE READING, PA Site 1 of 3 in cluster B	LUST	S104416656 N/A
Relative: Lower	LUST: Facility Id: 06-11347 Facility Type: Underground Storage Tank Containing Petroleum Facility Status: Cleanup Completed Status Date: 28-Sep-00 Description : HESTON SWARTLEY tanks 1, 2, and 3 Release Date: 5-Aug-89 Region: SC - 3		
Actual: 245 ft.			
10 ENE 1/4-1/2 2366 ft.	DECARLOS AUTO SALES 101 LANCASTER AVE READING, PA	LUST	S105801305 N/A
Relative: Lower	LUST: Facility Id: 06-63947 Facility Type: Underground Storage Tank Containing Petroleum Facility Status: Inactive Status Date: 20-Mar-03 Description : DECARLOS AUTO SALES TANKS 5 AND 6 Release Date: 15-Sep-97 Region: SC - 3		
Actual: 222 ft.			
B11 SSE 1/4-1/2 2369 ft.	EASTERN IND 810 NEW HOLLAND RD READING, PA 19603 Site 2 of 3 in cluster B	ACT 2-DEED VCP	S101473273 N/A
Relative: Lower	PA ACT 2 DEED: Facility Type : NON-RESIDENTIAL STATEWIDE HEALTH CLEANUP STANDARD SITES Municipality : Reading		
Actual: 239 ft.	VCP: Municipality: Reading		

Map ID
Direction
Distance
Distance (ft.)
Elevation

MAP FINDINGS

EASTERN IND (Continued)

EDR ID Number
EPA ID Number

Database(s)

S101473273

B12
SSE
1/4-1/2
2369 ft.

READING READY MIX PLT
810 NEW HOLLAND RD
READING, PA 19607

LUST
UST

U003216421
N/A

Site 3 of 3 in cluster B

Relative:
Lower

LUST:

Actual:
239 ft.

Facility Id: 06-29857
Facility Type: Underground Storage Tank Containing Petroleum
Facility Status: Cleanup Completed
Status Date: 22-Aug-96
Description : EASTERN IND INC tanks 1 and 2
Release Date: 5-Aug-89
Region: SC - 3

UST:

Owner Name: BERKS PROD
Capacity: 10000
Tank Seq No: 004
Owner ID: 1935
Address: PO BOX 421
READING, PA 19603
Tank Status: CURRENTLY IN USE
Telephone: (610) 374-5321

Facility ID: 06-29857
Date Installed: 07/20/1992
Chemical: DIESEL
Tank ID: 65211

13
ENE
1/2-1
3950 ft.

CONSUMERS GAS CO.
460 CANAL
READING, PA 19602

Coal Gas
G000000231
N/A

Relative:
Lower

COAL GAS SITE DESCRIPTION:

Site is at the southern end of South 5th Street, on the south side of Canal, south of the railroad tracks, north of the Schuylkill River. Site is a CERCLIS Site I.D. #PAD980539159

Actual:
207 ft.

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14
NE
1/2-1
4398 ft.

READING TANNERY
210 CHESTNUT
READING, PA 19067

Coal Gas
G000000154
N/A

Relative:
Lower

COAL GAS SITE DESCRIPTION:

Site is on the south side of Chestnut, between Mifflin and Second.

Actual:
214 ft.

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ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
READING	S105801399	STAGECOACH STOP RESTAURANT	RTE 222 / RTE 73		LUST
READING	S105801370	READING TUBE PLT 2	ROUTE 61		LUST
READING	S105801371	READING TUBE PLT 4	ROUTE 61		LUST
READING	S103284829	FAIRGROUND SQUARE MALL	3050 N FIFTH ST HWY		LUST

EPA Waste Codes Addendum

Code	Description
D001	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKEY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
D002	A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
D003	A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.
D004	ARSENIC
D005	BARIUM
D007	CHROMIUM
D008	LEAD
D035	METHYL ETHYL KETONE
D038	PYRIDINE
D040	TRICHLOROETHYLENE
F001	THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F003	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND

EPA Waste Codes Addendum

Code	Description
	F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F005	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
F006	WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.
P105	SODIUM AZIDE

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Elapsed ASTM days: Provides confirmation that this EDR report meets or exceeds the 90-day updating requirement of the ASTM standard.

FEDERAL ASTM STANDARD RECORDS

NPL: National Priority List

Source: EPA

Telephone: N/A

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/30/03

Date Made Active at EDR: 06/02/03

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 05/05/03

Elapsed ASTM days: 28

Date of Last EDR Contact: 05/09/03

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1

Telephone 617-918-1143

EPA Region 3

Telephone 215-814-5418

EPA Region 4

Telephone 404-562-8033

EPA Region 6

Telephone: 214-655-6659

EPA Region 8

Telephone: 303-312-6774

Proposed NPL: Proposed National Priority List Sites

Source: EPA

Telephone: N/A

Date of Government Version: 04/30/03

Date Made Active at EDR: 06/02/03

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 05/05/03

Elapsed ASTM days: 28

Date of Last EDR Contact: 05/05/03

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

Source: EPA

Telephone: 703-413-0223

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 03/19/03

Date Made Active at EDR: 04/08/03

Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 03/24/03

Elapsed ASTM days: 15

Date of Last EDR Contact: 06/23/03

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Source: EPA

Telephone: 703-413-0223

As of February 1995, CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) have been removed from CERCLIS. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund action or NPL consideration. EPA has removed approximately 25,000 NFRAP sites to lift the unintended barriers to the redevelopment of these properties and has archived them as historical records so EPA does not needlessly repeat the investigations in the future. This policy change is part of the EPA's Brownfields Redevelopment Program to help cities, states, private investors and affected citizens to promote economic redevelopment of unproductive urban sites.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/19/03
Date Made Active at EDR: 04/08/03
Database Release Frequency: Quarterly

Date of Data Arrival at EDR: 03/24/03
Elapsed ASTM days: 15
Date of Last EDR Contact: 06/23/03

CORRACTS: Corrective Action Report

Source: EPA

Telephone: 800-424-9346

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/31/03
Date Made Active at EDR: 05/08/03
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 04/07/03
Elapsed ASTM days: 31
Date of Last EDR Contact: 06/09/03

RCRIS: Resource Conservation and Recovery Information System

Source: EPA/NTIS

Telephone: 800-424-9346

Resource Conservation and Recovery Information System. RCRIS includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

Date of Government Version: 05/09/03
Date Made Active at EDR: 07/01/03
Database Release Frequency: Varies

Date of Data Arrival at EDR: 05/09/03
Elapsed ASTM days: 53
Date of Last EDR Contact: 06/26/03

ERNS: Emergency Response Notification System

Source: National Response Center, United States Coast Guard

Telephone: 202-260-2342

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/31/02
Date Made Active at EDR: 02/03/03
Database Release Frequency: Annually

Date of Data Arrival at EDR: 01/27/03
Elapsed ASTM days: 7
Date of Last EDR Contact: 04/28/03

FEDERAL ASTM SUPPLEMENTAL RECORDS

BRS: Biennial Reporting System

Source: EPA/NTIS

Telephone: 800-424-9346

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/99
Database Release Frequency: Biennially

Date of Last EDR Contact: 06/16/03
Date of Next Scheduled EDR Contact: 09/15/03

CONSENT: Superfund (CERCLA) Consent Decrees

Source: EPA Regional Offices

Telephone: Varies

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: N/A
Database Release Frequency: Varies

Date of Last EDR Contact: N/A
Date of Next Scheduled EDR Contact: N/A

ROD: Records Of Decision

Source: EPA

Telephone: 703-416-0223

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/09/03
Database Release Frequency: Annually

Date of Last EDR Contact: 04/07/03
Date of Next Scheduled EDR Contact: 07/07/03

DELISTED NPL: National Priority List Deletions

Source: EPA
Telephone: N/A

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/30/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 05/05/03
Date of Next Scheduled EDR Contact: 08/04/03

FINDS: Facility Index System/Facility Identification Initiative Program Summary Report

Source: EPA
Telephone: N/A

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 03/19/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 04/07/03
Date of Next Scheduled EDR Contact: 07/07/03

HMIRS: Hazardous Materials Information Reporting System

Source: U.S. Department of Transportation
Telephone: 202-366-4555

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 01/31/03
Database Release Frequency: Annually

Date of Last EDR Contact: 04/30/03
Date of Next Scheduled EDR Contact: 07/21/03

MLTS: Material Licensing Tracking System

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/23/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 04/07/03
Date of Next Scheduled EDR Contact: 07/07/03

MINES: Mines Master Index File

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959

Date of Government Version: 03/11/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 03/31/03
Date of Next Scheduled EDR Contact: 06/30/03

NPL LIENS: Federal Superfund Liens

Source: EPA
Telephone: 205-564-4267

Federal Superfund Liens. Under the authority granted the USEPA by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner receives notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/15/91
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 05/27/03
Date of Next Scheduled EDR Contact: 08/25/03

PADS: PCB Activity Database System

Source: EPA

Telephone: 202-564-3887

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 03/26/03
Database Release Frequency: Annually

Date of Last EDR Contact: 05/12/03
Date of Next Scheduled EDR Contact: 08/11/03

DOD: Department of Defense Sites

Source: USGS

Telephone: 703-648-5920

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 04/01/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 05/12/03
Date of Next Scheduled EDR Contact: 08/11/03

RAATS: RCRA Administrative Action Tracking System

Source: EPA

Telephone: 202-564-4104

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/95
Database Release Frequency: No Update Planned

Date of Last EDR Contact: 06/09/03
Date of Next Scheduled EDR Contact: 09/08/03

TRIS: Toxic Chemical Release Inventory System

Source: EPA

Telephone: 202-260-1531

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/00
Database Release Frequency: Annually

Date of Last EDR Contact: 06/27/03
Date of Next Scheduled EDR Contact: 09/22/03

TSCA: Toxic Substances Control Act

Source: EPA

Telephone: 202-260-5521

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/98
Database Release Frequency: Every 4 Years

Date of Last EDR Contact: 06/09/03
Date of Next Scheduled EDR Contact: 09/08/03

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Source: EPA

Telephone: 202-564-2501

Date of Government Version: 04/15/03
Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/23/03
Date of Next Scheduled EDR Contact: 09/22/03

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SSTS: Section 7 Tracking Systems

Source: EPA

Telephone: 202-564-5008

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/00

Database Release Frequency: Annually

Date of Last EDR Contact: 05/09/03

Date of Next Scheduled EDR Contact: 07/21/03

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-564-2501

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/15/03

Database Release Frequency: Quarterly

Date of Last EDR Contact: 06/23/03

Date of Next Scheduled EDR Contact: 09/22/03

STATE OF PENNSYLVANIA ASTM STANDARD RECORDS

SHWS: Hazardous Sites Cleanup Act Site List

Source: Department Environmental Protection

Telephone: 717-783-7816

The Hazardous Sites Cleanup Act Site List includes sites listed on PA Priority List, sites delisted from PA Priority List, Interim Response Completed sites, and Sites Being Studied or Response Being Planned.

Date of Government Version: 06/06/02

Date Made Active at EDR: 09/06/02

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 08/19/02

Elapsed ASTM days: 18

Date of Last EDR Contact: 05/21/03

PA SWF/LF:

SWF/LF: Solid Waste Facility Inventory/Transfer Stations

Source: Department of Environmental Protection

Telephone: 717-783-9258

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites. Database addresses may represent a sites locational and/or mailing address.

Date of Government Version: 11/04/02

Date Made Active at EDR: 01/16/03

Database Release Frequency: No Update Planned

Date of Data Arrival at EDR: 12/26/02

Elapsed ASTM days: 21

Date of Last EDR Contact: 06/23/03

SWF/LF: Operating Facilities

Source: Department of Environmental Protection

Telephone: 717-787-7564

Date of Government Version: 03/28/02

Date Made Active at EDR: 06/20/02

Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 06/06/02

Elapsed ASTM days: 14

Date of Last EDR Contact: 06/23/03

SWF/LF: Transfer Stations

Source: Department of Environmental Protection

Telephone: 717-787-7564

A listing of transfer stations.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/01/99
Date Made Active at EDR: 04/19/02
Database Release Frequency: Varies

Date of Data Arrival at EDR: 03/29/02
Elapsed ASTM days: 21
Date of Last EDR Contact: 06/23/03

SWF/LF: Inactive Solid Waste Landfill

Source: Department of Environmental Protection
Telephone: 717-783-9258

Inactive Solid Waste Facilities. This listing is no longer updated by the state.

Date of Government Version: 12/20/94
Date Made Active at EDR: 06/30/99
Database Release Frequency: No Update Planned

Date of Data Arrival at EDR: 06/08/99
Elapsed ASTM days: 22
Date of Last EDR Contact: 06/23/03

LUST: Storage Tank Release Sites

Source: Department of Environmental Protection
Telephone: 717-783-7509

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 04/11/03
Date Made Active at EDR: 05/12/03
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 04/18/03
Elapsed ASTM days: 24
Date of Last EDR Contact: 04/15/03

UST: Listing of Pennsylvania Regulated Underground Storage Tanks

Source: Department of Environmental Protection
Telephone: 717-772-5599

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 12/01/01
Date Made Active at EDR: 01/31/02
Database Release Frequency: Varies

Date of Data Arrival at EDR: 01/08/02
Elapsed ASTM days: 23
Date of Last EDR Contact: 04/15/03

VCP: Voluntary Cleanup Program Sites

Source: Department of Environmental Protection
Telephone: 717-783-2388

Sites involved in the Voluntary Cleanup Program

Date of Government Version: 05/09/03
Date Made Active at EDR: 06/03/03
Database Release Frequency: Semi-Annually

Date of Data Arrival at EDR: 05/23/03
Elapsed ASTM days: 11
Date of Last EDR Contact: 05/20/03

STATE OF PENNSYLVANIA ASTM SUPPLEMENTAL RECORDS

AST: Listing of Pennsylvania Regulated Aboveground Storage Tanks

Source: Department of Environmental Protection
Telephone: 717-772-5599

Registered Aboveground Storage Tanks.

Date of Government Version: 12/01/01
Database Release Frequency: Varies

Date of Last EDR Contact: 04/15/03
Date of Next Scheduled EDR Contact: 07/14/03

LAST: Storage Tank Release Sites

Source: Department of Environmental Protection
Telephone: 717-783-7509

Leaking Aboveground Storage Tank Incident Reports.

Date of Government Version: 04/11/03
Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 04/15/03
Date of Next Scheduled EDR Contact: 07/14/03

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ACT 2-DEED: Act 2-Deed Acknowledgment Sites

Source: Department of Environmental Protection

Telephone: 717-783-9470

This listing pertains to sites where the Department has approved a cleanup requiring a deed acknowledgment under Act 2. This list includes sites remediated to a non-residential Statewide health standard (Section 303(g)); all sites demonstrating attainment of a Site-specific standard (Section 304(m)); and sites being remediated as a special industrial area (Section 305(g)). Persons who remediated a site to a standard that requires a deed acknowledgment shall comply with the requirements of the Solid Waste Management Act or the Hazardous Sites Cleanup Act, as referenced in Act 2. These statutes require a property description section in the deed concerning the hazardous substance disposal on the site. The location of disposed hazardous substances and a description of the type of hazardous substances disposed on the site shall be included in the deed acknowledgment. A deed acknowledgment is required at the time of conveyance of the property.

Date of Government Version: 05/09/03

Database Release Frequency: Varies

Date of Last EDR Contact: 05/29/03

Date of Next Scheduled EDR Contact: 08/18/03

EDR PROPRIETARY HISTORICAL DATABASES

Former Manufactured Gas (Coal Gas) Sites: The existence and location of Coal Gas sites is provided exclusively to EDR by Real Property Scan, Inc. ©Copyright 1993 Real Property Scan, Inc. For a technical description of the types of hazards which may be found at such sites, contact your EDR customer service representative.

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The information contained in this report has predominantly been obtained from publicly available sources produced by entities other than Real Property Scan. While reasonable steps have been taken to insure the accuracy of this report, Real Property Scan does not guarantee the accuracy of this report. Any liability on the part of Real Property Scan is strictly limited to a refund of the amount paid. No claim is made for the actual existence of toxins at any site. This report does not constitute a legal opinion.

STATE OF PENNSYLVANIA BROWNFIELDS DATABASES RECORDS

Inst Control: Engineering and Institutional Controls at Act 2 Sites

Source: Department of Environmental Protection

Telephone: 717-783-9470

Under Act 2 and the accompanying regulations, Administration of Land Recycling Program, persons who perform a site cleanup using a site-specific standard or affect a special industrial area cleanup may use engineering or institutional controls to attain the cleanup. The sites listed had either an engineering control and/or an institutional control used in the remediation of the site.

Date of Government Version: 05/08/03

Database Release Frequency: Varies

Date of Last EDR Contact: 05/19/03

Date of Next Scheduled EDR Contact: 08/18/03

VCP: Voluntary Cleanup Program Sites

Source: Department of Environmental Protection

Telephone: 717-783-2388

Sites involved in the Voluntary Cleanup Program

Date of Government Version: 05/09/03

Database Release Frequency: Semi-Annually

Date of Last EDR Contact: 05/20/03

Date of Next Scheduled EDR Contact: 08/18/03

BROWNFIELDS: Brownfields Sites

Source: Department of Environmental Protection

Telephone: 717-783-7509

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A
Database Release Frequency: Varies

Date of Last EDR Contact: N/A
Date of Next Scheduled EDR Contact: N/A

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

Oil/Gas Pipelines: This data was obtained by EDR from the USGS in 1994. It is referred to by USGS as GeoData Digital Line Graphs from 1:100,000-Scale Maps. It was extracted from the transportation category including some oil, but primarily gas pipelines.

Electric Power Transmission Line Data

Source: PennWell Corporation

Telephone: (800) 823-6277

This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Child Care Facility List

Source: Department of Public Welfare

Telephone: 717-783-3856

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

STREET AND ADDRESS INFORMATION

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GEOCHECK[®] - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

BALDWIN HARDWARE MANUFACTURING CORP.
841 WYOMISSING BOULEVARD
READING, PA 19611

TARGET PROPERTY COORDINATES

Latitude (North):	40.322071 - 40° 19' 19.5"
Longitude (West):	75.942207 - 75° 56' 31.9"
Universal Transverse Mercator:	Zone 18
UTM X (Meters):	419949.7
UTM Y (Meters):	4463720.0
Elevation:	289 ft. above sea level

EDR's GeoCheck Physical Setting Source Addendum has been developed to assist the environmental professional with the collection of physical setting source information in accordance with ASTM 1527-00, Section 7.2.3. Section 7.2.3 requires that a current USGS 7.5 Minute Topographic Map (or equivalent, such as the USGS Digital Elevation Model) be reviewed. It also requires that one or more additional physical setting sources be sought when (1) conditions have been identified in which hazardous substances or petroleum products are likely to migrate to or from the property, and (2) more information than is provided in the current USGS 7.5 Minute Topographic Map (or equivalent) is generally obtained, pursuant to local good commercial or customary practice, to assess the impact of migration of recognized environmental conditions in connection with the property. Such additional physical setting sources generally include information about the topographic, hydrologic, hydrogeologic, and geologic characteristics of a site, and wells in the area.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata. EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

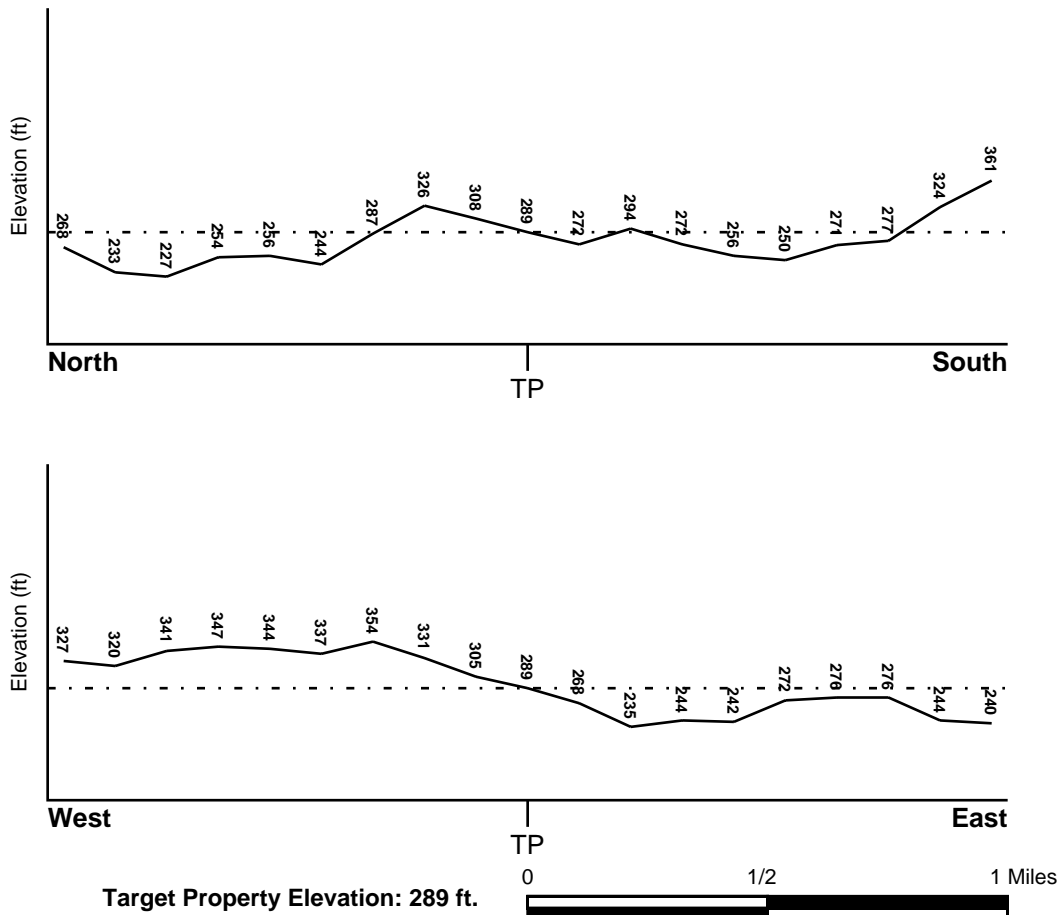
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

USGS Topographic Map: 2440075-C8 READING, PA
General Topographic Gradient: General ESE
Source: USGS 7.5 min quad index

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

<u>Target Property County</u>	<u>FEMA Flood</u>
BERKS, PA	<u>Electronic Data</u>
	YES - refer to the Overview Map and Detail Map
Flood Plain Panel at Target Property:	42011C0504E
Additional Panels in search area:	42011C0508E
	42011C0512E
	42011C0516E

NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic</u>
READING	<u>Data Coverage</u>
	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION</u>	<u>GENERAL DIRECTION</u>
Not Reported	<u>FROM TP</u>	<u>GROUNDWATER FLOW</u>

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Paleozoic
System:	Cambrian
Series:	Cambrian
Code:	C (decoded above as Era, System & Series)

GEOLOGIC AGE IDENTIFICATION

Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: HAGERSTOWN

Soil Surface Texture: silt loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained. Soils have intermediate water holding capacity. Depth to water table is more than 6 feet.

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: MODERATE

Depth to Bedrock Min: > 60 inches

Depth to Bedrock Max: > 80 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	8 inches	silt loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 6.00 Min: 0.60	Max: 6.50 Min: 4.50
2	8 inches	20 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 2.00 Min: 0.60	Max: 7.30 Min: 4.50
3	20 inches	72 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 2.00 Min: 0.60	Max: 7.30 Min: 5.10

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: silty clay loam

Surficial Soil Types: silty clay loam

Shallow Soil Types: silt loam

Deeper Soil Types: channery - silt loam
stratified loam
unweathered bedrock

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

According to ASTM E 1527-00, Section 7.2.2, "one or more additional state or local sources of environmental records may be checked, in the discretion of the environmental professional, to enhance and supplement federal and state sources... Factors to consider in determining which local or additional state records, if any, should be checked include (1) whether they are reasonably ascertainable, (2) whether they are sufficiently useful, accurate, and complete in light of the objective of the records review (see 7.1.1), and (3) whether they are obtained, pursuant to local, good commercial or customary practice." One of the record sources listed in Section 7.2.2 is water well information. Water well information can be used to assist the environmental professional in assessing sources that may impact groundwater flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A1	USGS0896613	0 - 1/8 Mile North
B4	USGS0896618	0 - 1/8 Mile ESE
B6	USGS0896615	0 - 1/8 Mile East
C7	USGS0896679	0 - 1/8 Mile NE
C10	USGS0896608	1/8 - 1/4 Mile NE
D12	USGS0896621	1/8 - 1/4 Mile ESE
D13	USGS0896685	1/8 - 1/4 Mile ESE
D16	USGS0896626	1/8 - 1/4 Mile ESE
E17	USGS0896698	1/4 - 1/2 Mile ESE
E19	USGS0896629	1/4 - 1/2 Mile ESE
E21	USGS0896699	1/4 - 1/2 Mile ESE
E24	USGS0896694	1/4 - 1/2 Mile ESE
F25	USGS0896708	1/4 - 1/2 Mile SSE
27	USGS0896598	1/4 - 1/2 Mile NE
G29	USGS0896642	1/2 - 1 Mile SSW
H30	USGS0896527	1/2 - 1 Mile NE
H31	USGS0896593	1/2 - 1 Mile ENE
H34	USGS0896521	1/2 - 1 Mile NE
I36	USGS0896595	1/2 - 1 Mile ENE
H37	USGS0896592	1/2 - 1 Mile NE
J39	USGS0896587	1/2 - 1 Mile NE
K41	USGS0896524	1/2 - 1 Mile NE
L43	USGS0896590	1/2 - 1 Mile NE
M45	USGS0896510	1/2 - 1 Mile NE
M46	USGS0896506	1/2 - 1 Mile NNE
N48	USGS0896653	1/2 - 1 Mile SSW
O51	USGS0896643	1/2 - 1 Mile ESE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

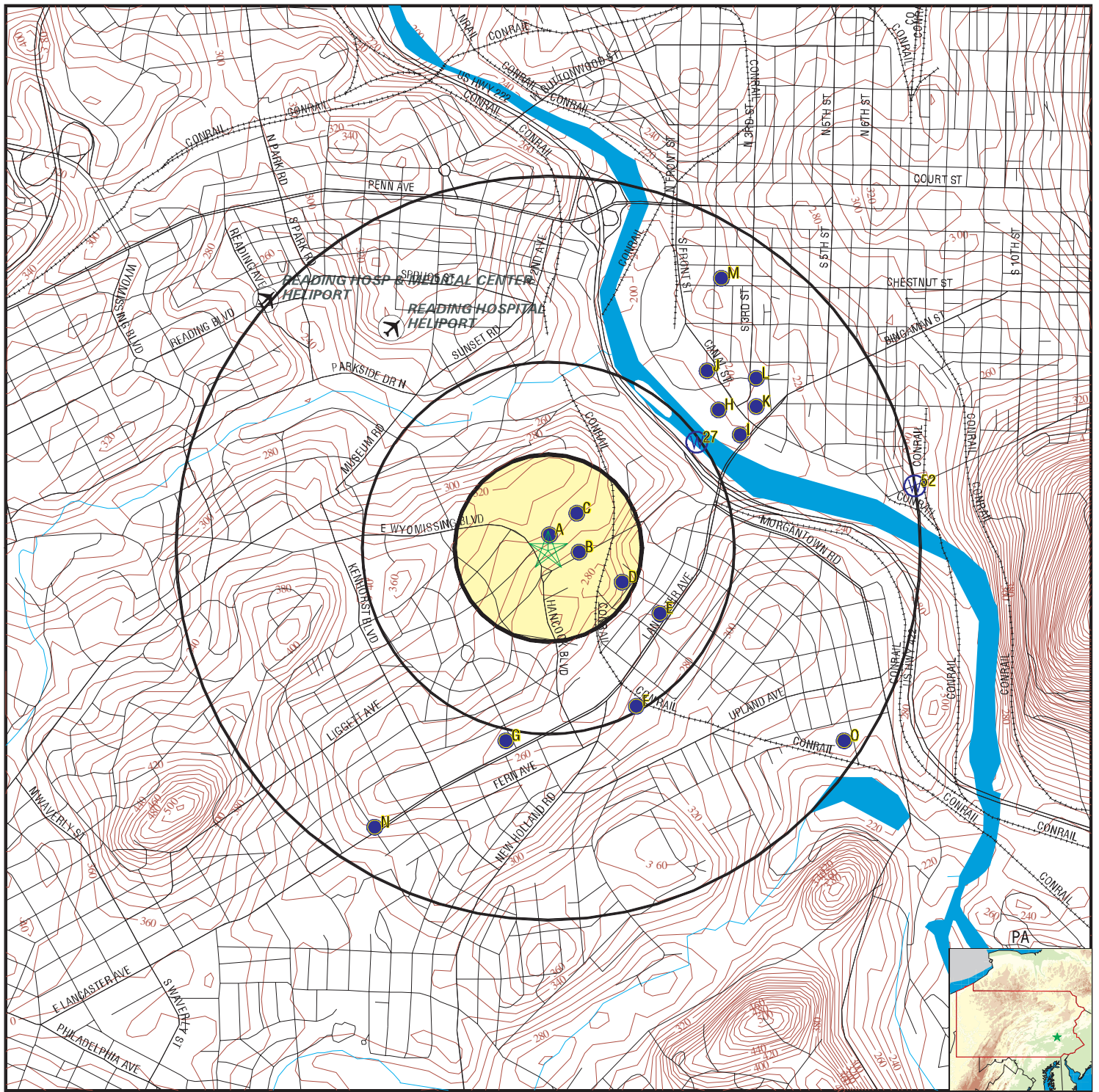
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	DPA00016482	0 - 1/8 Mile North
B3	DPA00016462	0 - 1/8 Mile ESE
B5	DPA00016472	0 - 1/8 Mile East
C8	DPA00016502	0 - 1/8 Mile NE
C9	DPA00016526	1/8 - 1/4 Mile NE
D11	DPA00016430	1/8 - 1/4 Mile ESE
D14	DPA00016439	1/8 - 1/4 Mile ESE
D15	DPA00016419	1/8 - 1/4 Mile ESE
E18	DPA00016391	1/4 - 1/2 Mile ESE
E20	DPA00016379	1/4 - 1/2 Mile ESE
E22	DPA00016392	1/4 - 1/2 Mile ESE
E23	DPA00016401	1/4 - 1/2 Mile ESE
F26	DPA00016274	1/4 - 1/2 Mile SSE
G28	DPA00016231	1/2 - 1 Mile SSW
H32	DPA00016619	1/2 - 1 Mile ENE
H33	DPA00016650	1/2 - 1 Mile NE
I35	DPA00016607	1/2 - 1 Mile ENE
J38	DPA00016678	1/2 - 1 Mile NE
K40	DPA00016644	1/2 - 1 Mile NE
L42	DPA00016672	1/2 - 1 Mile NE
M44	DPA00016792	1/2 - 1 Mile NE
M47	DPA00016804	1/2 - 1 Mile NNE
N49	DPA00016120	1/2 - 1 Mile SSW
O50	DPA00016232	1/2 - 1 Mile ESE
52	DPA00016551	1/2 - 1 Mile East

PHYSICAL SETTING SOURCE MAP - 01010092.1r



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location

TARGET PROPERTY: Baldwin Hardware Manufacturing Corp.
 ADDRESS: 841 Wyomissing Boulevard
 CITY/STATE/ZIP: Reading PA 19611
 LAT/LONG: 40.3221 / 75.9422

CUSTOMER: Loureiro Engineering Assoc. PC
 CONTACT: David N. Scotti
 INQUIRY #: 01010092.1r
 DATE: July 10, 2003 12:21 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

A1
North
0 - 1/8 Mile
Higher

FED USGS USGS0896613

Agency:	USGS	Site ID:	401921075563301
Site Name:	BE 1398		
Dec. Latitude:	40.32259		
Dec. Longitude:	-75.94215		
Coord Sys:	NAD83		
State:	PA		
County:	Berks County		
Altitude:	240		
Hydrologic code:	02040203		
Topographic:	Hillside (slope)		
Site Type:	Ground-water other than Spring		
Const Date:	19820218	Inven Date:	19820218
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	374BSPG		
Aquifer type:	Not Reported	Well depth:	559
Hole depth:	Not Reported	Source:	D
Project no:	Not Reported		

A2
North
0 - 1/8 Mile
Higher

PA WELLS DPA00016482

Site ID:	401921075563301	Type of Site:	well
Local well #:	1398	Date Drilled:	02/18/1982
Well Depth:	559	Longitude:	0755633
Latitude:	401921	Hydrologic Unit:	02040203
Lat/Long Accuracy:	ACCURATE TO +5 SECONDS	Municipality:	READING
County:	BERKS	Topography:	HILLSIDE
Formation:	374BSPG	Elevation Method:	interpolated from topographic map
Elevation Accuracy:	20	Quadrangle:	READING
Elevation:	240	Data Reliability:	not fld checked, rptng agency considers it ok
Date Record Created:	09/17/1987	Depth Data Source:	DRILLER
Date Record Updated:	05/16/1991		
Agency use of site:	Inventory Data Site Only		

Owner Information:

Owner:	BALDWIN HARDWARE		
Date of Ownership:	02/18/1982	Zip Code:	Not Reported

Other Owner Identification Information:

Other Identifier:	3	ID Assigner:	OWNER PA
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Casing Information:

Casing Top:	0	Casing Bottom:	101
Diameter:	8	Casing Wall Thickness:	Not Reported
Casing Material:	UNKNOWN		

Construction Information:

Construction Date:	02/18/1982	Finish:	Not Reported
Const. Data Source:	DRILLER	Construction Method:	AIR ROTARY
Driller:	C S GARBER & SONS INC		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Geohydrologic Information:

Top of Interval:	Not Reported	Bottom of Interval:	Not Reported
Contributing Unit:	PRIMARY	Lithology:	LIMESTONE
Formation Code:	374BSPG		

Hole Information:

Top of the Hole:	0	Bottom of the Hole:	Not Reported
Diameter:	8		

Opening Information:

Top opening interval:	148	Bottom opening interval:	Not Reported
Interval Yield:	Not Reported	Type of Packing:	Not Reported
Opening Material:	UNKNOWN	Type of Opening:	fractured rock
Top opening interval:	196	Bottom opening interval:	Not Reported
Interval Yield:	Not Reported	Type of Packing:	Not Reported
Opening Material:	UNKNOWN	Type of Opening:	fractured rock
Top opening interval:	475	Bottom opening interval:	Not Reported
Interval Yield:	Not Reported	Type of Packing:	Not Reported
Opening Material:	UNKNOWN	Type of Opening:	fractured rock

Aquifer Test Information:

Discharge Date:	02/18/1982	Discharge Type:	PUMPED
Data Source:	DRILLER		
Measurement Method:	REPORTED, METHOD NOT KNOWN		
Discharge:	300	SWL:	62.00
WL Data Source:	DRILLER		
WL Measurement Method:	REPORTED, METHOD NOT KNOWN		
Production WL:	Not Reported	Drawdown:	Not Reported
Spec. Cap.:	Not Reported	Test Length:	30
Status during measurement:	1		

Pump Intake Information:

Pump Intake:	315
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Site Use Information:

Date of Use:	Not Reported	Note:	Not Reported
Site Use:	WITHDRAWAL		

Water Use Information:

Use Date:	Not Reported	Use:	INDUSTRIAL
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B3
ESE
0 - 1/8 Mile
Lower

PA WELLS DPA00016462

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Site ID:	401918075562901	Type of Site:	well
Local well #:	1443	Date Drilled:	03/28/1985
Well Depth:	297	Longitude:	0755629
Latitude:	401918	Hydrologic Unit:	02040203
Lat/Long Accuracy:	ACCURATE TO +1 SECOND	Municipality:	READING
County:	BERKS	Topography:	UPLAND DRAW
Formation:	374BSPG	Elevation Method:	interpolated from topographic map
Elevation Accuracy:	10	Quadrangle:	READING
Elevation:	220	Data Reliability:	not fld checked, rptng agency considers it ok
Date Record Created:	04/30/1987	Depth Data Source:	DRILLER
Date Record Updated:	03/03/1990		
Agency use of site:	Inventory Data Site Only		

Owner Information:

Owner:	BALDWIN HARDWARE CORP		
Date of Ownership:	12/21/1984	Zip Code:	Not Reported

Other Owner Identification Information:

Other Identifier:	P. W. 4	ID Assigner:	OWNER PA
Other Identifier:	PA 0011371	ID Assigner:	NPDES PERMIT

Casing Information:

Casing Top:	0.33	Casing Bottom:	17.2
Diameter:	14	Casing Wall Thickness:	Not Reported
Casing Material:	STEEL		
Casing Top:	3	Casing Bottom:	97.4
Diameter:	10	Casing Wall Thickness:	Not Reported
Casing Material:	STEEL		

Construction Information:

Construction Date:	Not Reported	Finish:	Not Reported
Const. Data Source:	DRILLER	Construction Method:	AIR ROTARY
Driller:	C S GARBER & SONS INC		

Geohydrologic Information:

Top of Interval:	Not Reported	Bottom of Interval:	Not Reported
Contributing Unit:	PRIMARY	Lithology:	UNKNOWN
Formation Code:	374BSPG		

Hole Information:

Top of the Hole:	Not Reported	Bottom of the Hole:	181
Diameter:	10		

Opening Information:

Top opening interval:	121	Bottom opening interval:	Not Reported
Interval Yield:	Not Reported	Type of Packing:	Not Reported
Opening Material:	UNKNOWN	Type of Opening:	fractured rock
Top opening interval:	133	Bottom opening interval:	Not Reported
Interval Yield:	Not Reported	Type of Packing:	Not Reported
Opening Material:	UNKNOWN	Type of Opening:	fractured rock

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Top opening interval:	143	Bottom opening interval:	Not Reported
Interval Yield:	Not Reported	Type of Packing:	Not Reported
Opening Material:	UNKNOWN	Type of Opening:	fractured rock

Aquifer Test Information:

Discharge Date:	03/28/1985	Discharge Type:	PUMPED
Data Source:	DRILLER		
Measurement Method:	REPORTED, METHOD NOT KNOWN		
Discharge:	80	SWL:	63.50
WL Data Source:	DRILLER		
WL Measurement Method:	Not Reported		
Production WL:	147	Drawdown:	83.5
Spec. Cap.:	0.96	Test Length:	24
Status during measurement:	Not Reported		

Seal Information:

Top of Seal:	Not Reported	Bottom of Seal:	4
Type of Seal:	CEMENT GROUT		

Site Use Information:

Date of Use:	Not Reported	Note:	Not Reported
Site Use:	WITHDRAWAL		

Water Use Information:

Use Date:	Not Reported	Use:	OTHER
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B4
ESE
0 - 1/8 Mile
Lower

FED USGS USGS0896618

Agency:	USGS	Site ID:	401918075562901
Site Name:	BE 1443		
Dec. Latitude:	40.32176		
Dec. Longitude:	-75.94104		
Coord Sys:	NAD83		
State:	PA		
County:	Berks County		
Altitude:	220		
Hydrologic code:	02040203		
Topographic:	Upland draw		
Site Type:	Ground-water other than Spring		
Const Date:	19850328	Inven Date:	19850328
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	374BSPG		
Aquifer type:	Not Reported	Well depth:	297
Hole depth:	Not Reported	Source:	D
Project no:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

B5
East
0 - 1/8 Mile
Lower

PA WELLS DPA00016472

Site ID:	401919075562601	Type of Site:	well
Local well #:	1444	Date Drilled:	07/13/1985
Well Depth:	146	Longitude:	0755626
Latitude:	401919	Hydrologic Unit:	02040203
Lat/Long Accuracy:	ACCURATE TO +1 SECOND	Municipality:	READING
County:	BERKS	Topography:	UPLAND DRAW
Formation:	374BSPG	Elevation Method:	interpolated from topographic map
Elevation Accuracy:	10	Quadrangle:	READING
Elevation:	220	Data Reliability:	not fld checked, rptg agency considers it ok
Date Record Created:	04/27/1987	Depth Data Source:	DRILLER
Date Record Updated:	03/03/1990		
Agency use of site:	Inventory Data Site Only		

Owner Information:

Owner:	BALDWIN HARDWARE CORP		
Date of Ownership:	07/13/1985	Zip Code:	Not Reported

Other Owner Identification Information:

Other Identifier:	5	ID Assigner:	OWNER PA
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Casing Information:

Casing Top:	0	Casing Bottom:	3
Diameter:	18	Casing Wall Thickness:	Not Reported
Casing Material:	UNKNOWN		
Casing Top:	0	Casing Bottom:	103
Diameter:	14	Casing Wall Thickness:	Not Reported
Casing Material:	UNKNOWN		
Casing Top:	0	Casing Bottom:	106
Diameter:	10	Casing Wall Thickness:	Not Reported
Casing Material:	UNKNOWN		

Construction Information:

Construction Date:	07/13/1985	Finish:	Not Reported
Const. Data Source:	DRILLER	Construction Method:	AIR ROTARY
Driller:	C S GARBER & SONS INC		

Geohydrologic Information:

Top of Interval:	Not Reported	Bottom of Interval:	Not Reported
Contributing Unit:	PRIMARY	Lithology:	UNKNOWN
Formation Code:	374BSPG		

Hole Information:

Top of the Hole:	0	Bottom of the Hole:	106
Diameter:	10		
Top of the Hole:	106	Bottom of the Hole:	146
Diameter:	8		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Opening Information:

Top opening interval:	135	Bottom opening interval:	Not Reported
Interval Yield:	Not Reported	Type of Packing:	Not Reported
Opening Material:	UNKNOWN	Type of Opening:	fractured rock
Top opening interval:	146	Bottom opening interval:	Not Reported
Interval Yield:	Not Reported	Type of Packing:	Not Reported
Opening Material:	UNKNOWN	Type of Opening:	fractured rock
Top opening interval:	101	Bottom opening interval:	146
Interval Yield:	Not Reported	Type of Packing:	Not Reported
Opening Material:	STAINLESS STEEL	Type of Opening:	screen

Aquifer Test Information:

Discharge Date:	07/29/1985	Discharge Type:	PUMPED
Data Source:	DRILLER		
Measurement Method:	REPORTED, METHOD NOT KNOWN		
Discharge:	318	SWL:	56.82
WL Data Source:	DRILLER		
WL Measurement Method:	REPORTED, METHOD NOT KNOWN		
Production WL:	76.7	Drawdown:	Not Reported
Spec. Cap.:	16	Test Length:	24
Status during measurement:	Not Reported		

Pump Intake Information:

Pump Intake: 97

Site Use Information:

Date of Use:	Not Reported	Note:	Not Reported
Site Use:	WITHDRAWAL		

Water Use Information:

Use Date:	Not Reported	Use:	OTHER
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**B6
East
0 - 1/8 Mile
Lower**

FED USGS USGS0896615

Agency:	USGS	Site ID:	401919075562601
Site Name:	BE 1444		
Dec. Latitude:	40.32204		
Dec. Longitude:	-75.94021		
Coord Sys:	NAD83		
State:	PA		
County:	Berks County		
Altitude:	220		
Hydrologic code:	02040203		
Topographic:	Upland draw		
Site Type:	Ground-water other than Spring		
Const Date:	19850713	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	374BSPG		
Aquifer type:	Not Reported	Well depth:	146
Hole depth:	197	Source:	D
Project no:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

C7
NE
0 - 1/8 Mile
Higher

FED USGS USGS0896679

Agency:	USGS	Site ID:	401923075562801
Site Name:	BE 650		
Dec. Latitude:	40.32315		
Dec. Longitude:	-75.94076		
Coord Sys:	NAD83		
State:	PA		
County:	Berks County		
Altitude:	260		
Hydrologic code:	02040203		
Topographic:	Hillside (slope)		
Site Type:	Ground-water other than Spring		
Const Date:	19650101	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	374BSPG		
Aquifer type:	Not Reported	Well depth:	405
Hole depth:	405	Source:	Not Reported
Project no:	Not Reported		

C8
NE
0 - 1/8 Mile
Higher

PA WELLS DPA00016502

Site ID:	401923075562801	Type of Site:	well
Local well #:	650	Date Drilled:	01/01/1965
Well Depth:	405	Longitude:	0755628
Latitude:	401923	Hydrologic Unit:	02040203
Lat/Long Accuracy:	ACCURATE TO +1 SECOND	Municipality:	READING
County:	BERKS	Topography:	HILLSIDE
Formation:	374BSPG	Elevation Method:	interpolated from topographic map
Elevation Accuracy:	10	Quadrangle:	READING
Elevation:	260	Data Reliability:	field checked by reporting agency
Date Record Created:	12/06/1976	Depth Data Source:	UNKNOWN
Date Record Updated:	06/01/1990		
Agency use of site:	Inventory Data Site Only		

Owner Information:

Owner:	BALDWIN HARDWARE MFG		
Date of Ownership:	1965	Zip Code:	Not Reported

Casing Information:

Casing Top:	0	Casing Bottom:	51
Diameter:	6.25	Casing Wall Thickness:	Not Reported
Casing Material:	UNKNOWN		

Construction Information:

Construction Date:	1965	Finish:	Not Reported
Const. Data Source:	UNKNOWN	Construction Method:	AIR ROTARY
Driller:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Geohydrologic Information:

Top of Interval:	Not Reported	Bottom of Interval:	Not Reported
Contributing Unit:	PRIMARY	Lithology:	LIMESTONE
Formation Code:	374BSPG		

Hole Information:

Top of the Hole:	Not Reported	Bottom of the Hole:	405
Diameter:	Not Reported		

Opening Information:

Top opening interval:	160	Bottom opening interval:	Not Reported
Interval Yield:	Not Reported	Type of Packing:	Not Reported
Opening Material:	UNKNOWN	Type of Opening:	fractured rock

Aquifer Test Information:

Discharge Date:	03/01/1965	Discharge Type:	PUMPED
Data Source:	Not Reported		
Measurement Method:	Not Reported		
Discharge:	35	SWL:	60.00
WL Data Source:	USGS OR PAGES		
WL Measurement Method:	REPORTED, METHOD NOT KNOWN		
Production WL:	210	Drawdown:	150
Spec. Cap.:	0.23	Test Length:	9
Status during measurement:	Not Reported		

Site Use Information:

Date of Use:	Not Reported	Note:	Not Reported
Site Use:	WITHDRAWAL		

Water Use Information:

Use Date:	Not Reported	Use:	INDUSTRIAL
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Water Quality Information:

Date of Measurement:	03/01/1965	Formation Sampled:	374BSPG
Code:	00095	Value:	820
Date of Measurement:	03/01/1965	Formation Sampled:	374BSPG
Code:	00400	Value:	7
Date of Measurement:	03/01/1965	Formation Sampled:	374BSPG
Code:	00900	Value:	270

C9
NE
1/8 - 1/4 Mile
Higher

PA WELLS DPA00016526

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Site ID:	401925075562801	Type of Site:	well
Local well #:	1397	Date Drilled:	01/31/1981
Well Depth:	380	Longitude:	0755628
Latitude:	401925	Hydrologic Unit:	02040203
Lat/Long Accuracy:	ACCURATE TO +5 SECONDS	Municipality:	READING
County:	BERKS	Topography:	HILLSIDE
Formation:	374BSPG	Elevation Method:	interpolated from topographic map
Elevation Accuracy:	10	Quadrangle:	READING
Elevation:	290	Data Reliability:	not fld checked, rptng agency considers it ok
Date Record Created:	09/17/1987	Depth Data Source:	DRILLER
Date Record Updated:	03/03/1990		
Agency use of site:	Inventory Data Site Only		

Owner Information:

Owner:	BALDWIN HARDWARE		
Date of Ownership:	01/31/1981	Zip Code:	Not Reported

Other Owner Identification Information:

Other Identifier:	2	ID Assigner:	OWNER PA
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Casing Information:

Casing Top:	0	Casing Bottom:	68
Diameter:	8	Casing Wall Thickness:	Not Reported
Casing Material:	STEEL		

Construction Information:

Construction Date:	01/31/1981	Finish:	Not Reported
Const. Data Source:	DRILLER	Construction Method:	AIR ROTARY
Driller:	C S GARBER & SONS INC		

Geohydrologic Information:

Top of Interval:	Not Reported	Bottom of Interval:	Not Reported
Contributing Unit:	PRIMARY	Lithology:	LIMESTONE
Formation Code:	374BSPG		

Hole Information:

Top of the Hole:	0	Bottom of the Hole:	Not Reported
Diameter:	8		

Opening Information:

Top opening interval:	80	Bottom opening interval:	Not Reported
Interval Yield:	Not Reported	Type of Packing:	Not Reported
Opening Material:	UNKNOWN	Type of Opening:	fractured rock
Top opening interval:	94	Bottom opening interval:	Not Reported
Interval Yield:	Not Reported	Type of Packing:	Not Reported
Opening Material:	UNKNOWN	Type of Opening:	fractured rock

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer Test Information:

Discharge Date:	01/31/1986	Discharge Type:	PUMPED
Data Source:	DRILLER		
Measurement Method:	REPORTED, METHOD NOT KNOWN		
Discharge:	150	SWL:	50.00
WL Data Source:	DRILLER		
WL Measurement Method:	REPORTED, METHOD NOT KNOWN		
Production WL:	Not Reported	Drawdown:	Not Reported
Spec. Cap.:	Not Reported	Test Length:	30
Status during measurement:	1		

Pump Intake Information:

Pump Intake: 280

Site Use Information:

Date of Use:	Not Reported	Note:	Not Reported
Site Use:	WITHDRAWAL		

Water Use Information:

Use Date:	Not Reported	Use:	INDUSTRIAL
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C10
NE
1/8 - 1/4 Mile
Higher

FED USGS USGS0896608

Agency:	USGS	Site ID:	401925075562801
Site Name:	BE 1397		
Dec. Latitude:	40.3237		
Dec. Longitude:	-75.94076		
Coord Sys:	NAD83		
State:	PA		
County:	Berks County		
Altitude:	290		
Hydrologic code:	02040203		
Topographic:	Hillside (slope)		
Site Type:	Ground-water other than Spring		
Const Date:	19810131	Inven Date:	19810131
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	374BSPG		
Aquifer type:	Not Reported	Well depth:	380
Hole depth:	Not Reported	Source:	D
Project no:	Not Reported		

D11
ESE
1/8 - 1/4 Mile
Lower

PA WELLS DPA00016430

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Site ID:	401914075562101	Type of Site:	well
Local well #:	302	Date Drilled:	01/01/1946
Well Depth:	550	Longitude:	0755621
Latitude:	401914	Hydrologic Unit:	02040203
Lat/Long Accuracy:	ACCURATE TO +1 SECOND	Municipality:	READING
County:	BERKS	Topography:	HILLTOP
Formation:	374BSPG	Elevation Method:	interpolated from topographic map
Elevation Accuracy:	10	Quadrangle:	READING
Elevation:	240	Data Reliability:	field checked by reporting agency
Date Record Created:	12/06/1976	Depth Data Source:	UNKNOWN
Date Record Updated:	06/01/1990		
Agency use of site:	Inventory Data Site Only		

Owner Information:

Owner:	INTERSTATE CONTAINER	Zip Code:	Not Reported
Date of Ownership:	1946		

Casing Information:

Casing Top:	0	Casing Bottom:	48
Diameter:	8	Casing Wall Thickness:	Not Reported
Casing Material:	UNKNOWN		

Construction Information:

Construction Date:	1946	Finish:	Not Reported
Const. Data Source:	UNKNOWN	Construction Method:	CABLE TOOL
Driller:	Not Reported		

Geohydrologic Information:

Top of Interval:	Not Reported	Bottom of Interval:	Not Reported
Contributing Unit:	PRIMARY	Lithology:	LIMESTONE
Formation Code:	374BSPG		

Hole Information:

Top of the Hole:	Not Reported	Bottom of the Hole:	550
Diameter:	Not Reported		

Aquifer Test Information:

Discharge Date:	12/01/1946	Discharge Type:	PUMPED
Data Source:	Not Reported		
Measurement Method:	Not Reported		
Discharge:	60	SWL:	25.00
WL Data Source:	USGS OR PAGS		
WL Measurement Method:	REPORTED, METHOD NOT KNOWN		
Production WL:	250	Drawdown:	225
Spec. Cap.:	0.27	Test Length:	Not Reported
Status during measurement:	Not Reported		

Site Use Information:

Date of Use:	Not Reported	Note:	Not Reported
Site Use:	DESTROYED		

Water Use Information:

Use Date:	Not Reported	Use:	UNUSED
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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

D12
ESE
1/8 - 1/4 Mile
Lower

FED USGS USGS0896621

Agency:	USGS	Site ID:	401914075562101
Site Name:	BE 302		
Dec. Latitude:	40.32065		
Dec. Longitude:	-75.93882		
Coord Sys:	NAD83		
State:	PA		
County:	Berks County		
Altitude:	240		
Hydrologic code:	02040203		
Topographic:	Hilltop		
Site Type:	Ground-water other than Spring		
Const Date:	19460101	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	374BSPG		
Aquifer type:	Not Reported	Well depth:	550
Hole depth:	550	Source:	Not Reported
Project no:	Not Reported		

D13
ESE
1/8 - 1/4 Mile
Lower

FED USGS USGS0896685

Agency:	USGS	Site ID:	401916075561901
Site Name:	BE 304		
Dec. Latitude:	40.3212		
Dec. Longitude:	-75.93826		
Coord Sys:	NAD83		
State:	PA		
County:	Berks County		
Altitude:	240		
Hydrologic code:	02040203		
Topographic:	Hilltop		
Site Type:	Ground-water other than Spring		
Const Date:	19470101	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	374BSPG		
Aquifer type:	Not Reported	Well depth:	700
Hole depth:	700	Source:	Not Reported
Project no:	Not Reported		

D14
ESE
1/8 - 1/4 Mile
Lower

PA WELLS DPA00016439

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Site ID:	401916075561901	Type of Site:	well
Local well #:	304	Date Drilled:	01/01/1947
Well Depth:	700	Longitude:	0755619
Latitude:	401916	Hydrologic Unit:	02040203
Lat/Long Accuracy:	ACCURATE TO +1 SECOND	Municipality:	READING
County:	BERKS	Topography:	HILLTOP
Formation:	374BSPG	Elevation Method:	interpolated from topographic map
Elevation Accuracy:	10	Quadrangle:	READING
Elevation:	240	Data Reliability:	field checked by reporting agency
Date Record Created:	12/06/1976	Depth Data Source:	UNKNOWN
Date Record Updated:	06/01/1990		
Agency use of site:	Inventory Data Site Only		

Owner Information:

Owner:	INTERSTATE CONTAINER		
Date of Ownership:	1947	Zip Code:	Not Reported

Casing Information:

Casing Top:	0	Casing Bottom:	43.3
Diameter:	8	Casing Wall Thickness:	Not Reported
Casing Material:	UNKNOWN		

Construction Information:

Construction Date:	1947	Finish:	Not Reported
Const. Data Source:	UNKNOWN	Construction Method:	CABLE TOOL
Driller:	Not Reported		

Geohydrologic Information:

Top of Interval:	Not Reported	Bottom of Interval:	Not Reported
Contributing Unit:	PRIMARY	Lithology:	LIMESTONE
Formation Code:	374BSPG		

Hole Information:

Top of the Hole:	Not Reported	Bottom of the Hole:	700
Diameter:	Not Reported		

Aquifer Test Information:

Discharge Date:	04/01/1971	Discharge Type:	PUMPED
Data Source:	Not Reported		
Measurement Method:	Not Reported		
Discharge:	154	SWL:	42.00
WL Data Source:	USGS OR PAGS		
WL Measurement Method:	STEEL TAPE		
Production WL:	Not Reported	Drawdown:	Not Reported
Spec. Cap.:	Not Reported	Test Length:	10
Status during measurement:	Not Reported		

Site Use Information:

Date of Use:	Not Reported	Note:	Not Reported
Site Use:	WITHDRAWAL		

Water Use Information:

Use Date:	Not Reported	Use:	INDUSTRIAL
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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Water Quality Information:

Date of Measurement:	197104	Formation Sampled:	374BSPG
Code:	00010	Value:	17
Date of Measurement:	197104	Formation Sampled:	374BSPG
Code:	00400	Value:	6.7
Date of Measurement:	197104	Formation Sampled:	374BSPG
Code:	00095	Value:	640
Date of Measurement:	197104	Formation Sampled:	374BSPG
Code:	00900	Value:	190

D15
ESE
1/8 - 1/4 Mile
Lower

PA WELLS DPA00016419

Site ID:	401913075561902	Type of Site:	well
Local well #:	303	Date Drilled:	1947
Well Depth:	600	Longitude:	0755619
Latitude:	401913	Hydrologic Unit:	02040203
Lat/Long Accuracy:	ACCURATE TO +1 SECOND	Municipality:	READING
County:	BERKS	Topography:	HILLTOP
Formation:	374BSPG	Elevation Method:	interpolated from topographic map
Elevation Accuracy:	10	Quadrangle:	READING
Elevation:	240	Data Reliability:	field checked by reporting agency
Date Record Created:	12/06/1976	Depth Data Source:	UNKNOWN
Date Record Updated:	11/26/1991		
Agency use of site:	Inventory Data Site Only		

Owner Information:

Owner:	INTERSTATE CONT AINE		
Date of Ownership:	1947	Zip Code:	Not Reported

Casing Information:

Casing Top:	0	Casing Bottom:	36
Diameter:	8	Casing Wall Thickness:	Not Reported
Casing Material:	UNKNOWN		

Construction Information:

Construction Date:	1947	Finish:	Not Reported
Const. Data Source:	UNKNOWN	Construction Method:	CABLE TOOL
Driller:	Not Reported		

Geohydrologic Information:

Top of Interval:	Not Reported	Bottom of Interval:	Not Reported
Contributing Unit:	PRIMARY	Lithology:	LIMESTONE
Formation Code:	374BSPG		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Aquifer Test Information:

Discharge Date:	1978	Discharge Type:	PUMPED
Data Source:	Not Reported		
Measurement Method:	Not Reported		
Discharge:	60	SWL:	32.00
WL Data Source:	UNKNOWN		
WL Measurement Method:	REPORTED, METHOD NOT KNOWN		
Production WL:	250	Drawdown:	218
Spec. Cap.:	0.28	Test Length:	6
Status during measurement:	Not Reported		

Site Use Information:

Date of Use:	Not Reported	Note:	Not Reported
Site Use:	DESTROYED		

Water Use Information:

Use Date:	Not Reported	Use:	UNUSED
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D16
ESE
1/8 - 1/4 Mile
Lower

FED USGS USGS0896626

Agency:	USGS	Site ID:	401913075561902
Site Name:	BE 303		
Dec. Latitude:	40.32037		
Dec. Longitude:	-75.93826		
Coord Sys:	NAD83		
State:	PA		
County:	Berks County		
Altitude:	240		
Hydrologic code:	02040203		
Topographic:	Hilltop		
Site Type:	Ground-water other than Spring		
Const Date:	1947	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	374BSPG		
Aquifer type:	Not Reported	Well depth:	600
Hole depth:	Not Reported	Source:	Not Reported
Project no:	Not Reported		

E17
ESE
1/4 - 1/2 Mile
Lower

FED USGS USGS0896698

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Agency:	USGS	Site ID:	401910075561501
Site Name:	BE 482		
Dec. Latitude:	40.31954		
Dec. Longitude:	-75.93715		
Coord Sys:	NAD83		
State:	PA		
County:	Berks County		
Altitude:	210		
Hydrologic code:	02040203		
Topographic:	Valley flat		
Site Type:	Ground-water other than Spring		
Const Date:	19480101	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	374BSPG		
Aquifer type:	Not Reported	Well depth:	355
Hole depth:	355	Source:	Not Reported
Project no:	Not Reported		

E18
ESE
1/4 - 1/2 Mile
Lower

PA WELLS DPA00016391

Site ID:	401910075561501	Type of Site:	well
Local well #:	482	Date Drilled:	01/01/1948
Well Depth:	355	Longitude:	0755615
Latitude:	401910	Hydrologic Unit:	02040203
Lat/Long Accuracy:	ACCURATE TO +1 SECOND	Municipality:	READING
County:	BERKS	Topography:	VALLEY FLAT
Formation:	374BSPG	Elevation Method:	interpolated from topographic map
Elevation Accuracy:	10	Quadrangle:	READING
Elevation:	210	Data Reliability:	field checked by reporting agency
Date Record Created:	12/06/1976	Depth Data Source:	UNKNOWN
Date Record Updated:	06/01/1990		
Agency use of site:	Inventory Data Site Only		

Owner Information:

Owner:	O B SWEATER DYERS, I		
Date of Ownership:	1948	Zip Code:	Not Reported

Casing Information:

Casing Top:	0	Casing Bottom:	65
Diameter:	6	Casing Wall Thickness:	Not Reported
Casing Material:	UNKNOWN		

Construction Information:

Construction Date:	1948	Finish:	Not Reported
Const. Data Source:	UNKNOWN	Construction Method:	CABLE TOOL
Driller:	Not Reported		

Geohydrologic Information:

Top of Interval:	Not Reported	Bottom of Interval:	Not Reported
Contributing Unit:	PRIMARY	Lithology:	LIMESTONE
Formation Code:	374BSPG		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Hole Information:

Top of the Hole:	Not Reported	Bottom of the Hole:	355
Diameter:	Not Reported		

Aquifer Test Information:

Discharge Date:	02/01/1948	Discharge Type:	PUMPED
Data Source:	Not Reported		
Measurement Method:	Not Reported		
Discharge:	30	SWL:	19.00
WL Data Source:	USGS OR PAGS		
WL Measurement Method:	REPORTED, METHOD NOT KNOWN		
Production WL:	Not Reported	Drawdown:	Not Reported
Spec. Cap.:	Not Reported	Test Length:	Not Reported
Status during measurement:	Not Reported		

Site Use Information:

Date of Use:	Not Reported	Note:	Not Reported
Site Use:	UNUSED		

Water Use Information:

Use Date:	Not Reported	Use:	UNUSED
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E19
ESE
1/4 - 1/2 Mile
Lower

FED USGS **USGS0896629**

Agency:	USGS	Site ID:	401909075561301
Site Name:	BE 431		
Dec. Latitude:	40.31926		
Dec. Longitude:	-75.9366		
Coord Sys:	NAD83		
State:	PA		
County:	Berks County		
Altitude:	230		
Hydrologic code:	02040203		
Topographic:	Hillside (slope)		
Site Type:	Ground-water other than Spring		
Const Date:	19480101	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	374BSPG		
Aquifer type:	Not Reported	Well depth:	586
Hole depth:	586	Source:	Not Reported
Project no:	Not Reported		

E20
ESE
1/4 - 1/2 Mile
Lower

PA WELLS **DPA00016379**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Site ID:	401909075561301	Type of Site:	well
Local well #:	431	Date Drilled:	01/01/1948
Well Depth:	586	Longitude:	0755613
Latitude:	401909	Hydrologic Unit:	02040203
Lat/Long Accuracy:	ACCURATE TO +1 SECOND	Municipality:	READING
County:	BERKS	Topography:	HILLSIDE
Formation:	374BSPG	Elevation Method:	interpolated from topographic map
Elevation Accuracy:	10	Quadrangle:	READING
Elevation:	230	Data Reliability:	field checked by reporting agency
Date Record Created:	12/06/1976	Depth Data Source:	UNKNOWN
Date Record Updated:	06/01/1990		
Agency use of site:	Inventory Data Site Only		

Owner Information:

Owner:	GILBERTS ASSOCI ATES	Zip Code:	Not Reported
Date of Ownership:	1948		

Casing Information:

Casing Top:	0	Casing Bottom:	47.7
Diameter:	9	Casing Wall Thickness:	Not Reported
Casing Material:	UNKNOWN		

Construction Information:

Construction Date:	1948	Finish:	Not Reported
Const. Data Source:	UNKNOWN	Construction Method:	CABLE TOOL
Driller:	Not Reported		

Geohydrologic Information:

Top of Interval:	Not Reported	Bottom of Interval:	Not Reported
Contributing Unit:	PRIMARY	Lithology:	LIMESTONE
Formation Code:	374BSPG		

Hole Information:

Top of the Hole:	Not Reported	Bottom of the Hole:	586
Diameter:	Not Reported		

Aquifer Test Information:

Discharge Date:	02/01/1948	Discharge Type:	PUMPED
Data Source:	Not Reported		
Measurement Method:	Not Reported		
Discharge:	409	SWL:	56.00
WL Data Source:	USGS OR PAPS		
WL Measurement Method:	REPORTED, METHOD NOT KNOWN		
Production WL:	80	Drawdown:	24
Spec. Cap.:	17	Test Length:	48
Status during measurement:	Not Reported		

Site Use Information:

Date of Use:	Not Reported	Note:	Not Reported
Site Use:	WITHDRAWAL		

Water Use Information:

Use Date:	Not Reported	Use:	AIR CONDITIONING
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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Water Quality Information:

Date of Measurement:	02/01/1948	Formation Sampled:	374BSPG
Code:	00900	Value:	310
Date of Measurement:	02/01/1948	Formation Sampled:	374BSPG
Code:	00095	Value:	880
Date of Measurement:	02/01/1948	Formation Sampled:	374BSPG
Code:	00400	Value:	7.5

E21
ESE
1/4 - 1/2 Mile
Lower

FED USGS USGS0896699

Agency:	USGS	Site ID:	401910075561201
Site Name:	BE 428		
Dec. Latitude:	40.31954		
Dec. Longitude:	-75.93632		
Coord Sys:	NAD83		
State:	PA		
County:	Berks County		
Altitude:	225		
Hydrologic code:	02040203		
Topographic:	Hillside (slope)		
Site Type:	Ground-water other than Spring		
Const Date:	19490101	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	374BSPG		
Aquifer type:	Not Reported	Well depth:	346
Hole depth:	346	Source:	Not Reported
Project no:	Not Reported		

E22
ESE
1/4 - 1/2 Mile
Lower

PA WELLS DPA00016392

Site ID:	401910075561201	Type of Site:	well
Local well #:	428	Date Drilled:	01/01/1949
Well Depth:	346	Longitude:	0755612
Latitude:	401910	Hydrologic Unit:	02040203
Lat/Long Accuracy:	ACCURATE TO +1 SECOND	Municipality:	READING
County:	BERKS	Topography:	HILLSIDE
Formation:	374BSPG	Elevation Method:	interpolated from topographic map
Elevation Accuracy:	20	Quadrangle:	READING
Elevation:	220	Data Reliability:	field checked by reporting agency
Date Record Created:	12/06/1976	Depth Data Source:	UNKNOWN
Date Record Updated:	06/01/1990		
Agency use of site:	Inventory Data Site Only		

Owner Information:

Owner:	GILBERTS ASSOCIATES		
Date of Ownership:	1949	Zip Code:	Not Reported

Casing Information:

Casing Top:	0	Casing Bottom:	107
Diameter:	7	Casing Wall Thickness:	Not Reported
Casing Material:	UNKNOWN		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Construction Information:

Construction Date:	1949	Finish:	Not Reported
Const. Data Source:	UNKNOWN	Construction Method:	CABLE TOOL
Driller:	Not Reported		

Geohydrologic Information:

Top of Interval:	Not Reported	Bottom of Interval:	Not Reported
Contributing Unit:	PRIMARY	Lithology:	LIMESTONE
Formation Code:	374BSPG		

Hole Information:

Top of the Hole:	Not Reported	Bottom of the Hole:	346
Diameter:	Not Reported		

Aquifer Test Information:

Discharge Date:	01/01/1949	Discharge Type:	Not Reported
Data Source:	Not Reported		
Measurement Method:	Not Reported		
Discharge:	Not Reported	SWL:	35.00
WL Data Source:	USGS OR PAGES		
WL Measurement Method:	REPORTED, METHOD NOT KNOWN		
Production WL:	Not Reported	Drawdown:	Not Reported
Spec. Cap.:	Not Reported	Test Length:	Not Reported
Status during measurement:	1		

Site Use Information:

Date of Use:	Not Reported	Note:	Not Reported
Site Use:	RECHARGE		

Water Use Information:

Use Date:	Not Reported	Use:	UNUSED
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E23
ESE
1/4 - 1/2 Mile
Lower

PA WELLS DPA00016401

Site ID:	401911075561101	Type of Site:	well
Local well #:	432	Date Drilled:	01/01/1948
Well Depth:	888	Longitude:	0755611
Latitude:	401911	Hydrologic Unit:	02040203
Lat/Long Accuracy:	ACCURATE TO +1 SECOND	Municipality:	READING
County:	BERKS	Topography:	HILLSIDE
Formation:	374BSPG	Elevation Method:	interpolated from topographic map
Elevation Accuracy:	10	Quadrangle:	READING
Elevation:	230	Data Reliability:	field checked by reporting agency
Date Record Created:	12/06/1976	Depth Data Source:	UNKNOWN
Date Record Updated:	06/01/1990		
Agency use of site:	Inventory Data Site Only		

Owner Information:

Owner:	GILBERTS ASSOCIATES	Zip Code:	Not Reported
Date of Ownership:	1948		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Casing Information:

Casing Top:	0	Casing Bottom:	110
Diameter:	8	Casing Wall Thickness:	Not Reported
Casing Material:	UNKNOWN		

Construction Information:

Construction Date:	1948	Finish:	Not Reported
Const. Data Source:	UNKNOWN	Construction Method:	CABLE TOOL
Driller:	Not Reported		

Geohydrologic Information:

Top of Interval:	Not Reported	Bottom of Interval:	Not Reported
Contributing Unit:	PRIMARY	Lithology:	LIMESTONE
Formation Code:	374BSPG		

Hole Information:

Top of the Hole:	Not Reported	Bottom of the Hole:	888
Diameter:	Not Reported		

Aquifer Test Information:

Discharge Date:	04/01/1971	Discharge Type:	PUMPED
Data Source:	Not Reported		
Measurement Method:	Not Reported		
Discharge:	383	SWL:	11.00
WL Data Source:	USGS OR PAGES		
WL Measurement Method:	STEEL TAPE		
Production WL:	91	Drawdown:	80
Spec. Cap.:	4.79	Test Length:	86
Status during measurement:	Not Reported		

Site Use Information:

Date of Use:	Not Reported	Note:	Not Reported
Site Use:	WITHDRAWAL		

Water Use Information:

Use Date:	Not Reported	Use:	AIR CONDITIONING
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E24
ESE
1/4 - 1/2 Mile
Lower

FED USGS USGS0896694

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Agency:	USGS	Site ID:	401911075561101
Site Name:	BE 432		
Dec. Latitude:	40.31981		
Dec. Longitude:	-75.93604		
Coord Sys:	NAD83		
State:	PA		
County:	Berks County		
Altitude:	230		
Hydrologic code:	02040203		
Topographic:	Hillside (slope)		
Site Type:	Ground-water other than Spring		
Const Date:	19480101	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	374BSPG		
Aquifer type:	Not Reported	Well depth:	888
Hole depth:	888	Source:	Not Reported
Project no:	Not Reported		

**F25
SSE
1/4 - 1/2 Mile
Lower**

FED USGS USGS0896708

Agency:	USGS	Site ID:	401857075561701
Site Name:	BE 430		
Dec. Latitude:	40.31593		
Dec. Longitude:	-75.93771		
Coord Sys:	NAD83		
State:	PA		
County:	Berks County		
Altitude:	260		
Hydrologic code:	02040203		
Topographic:	Hillside (slope)		
Site Type:	Ground-water other than Spring		
Const Date:	19550101	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	370CMBR		
Aquifer type:	Not Reported	Well depth:	150
Hole depth:	Not Reported	Source:	Not Reported
Project no:	Not Reported		

**F26
SSE
1/4 - 1/2 Mile
Lower**

PA WELLS DPA00016274

Site ID:	401857075561701	Type of Site:	well
Local well #:	430	Date Drilled:	01/01/1955
Well Depth:	150	Longitude:	0755617
Latitude:	401857	Hydrologic Unit:	02040203
Lat/Long Accuracy:	ACCURATE TO +1 SECOND	Municipality:	READING
County:	BERKS	Topography:	HILLSIDE
Formation:	370CMBR	Elevation Method:	interpolated from topographic map
Elevation Accuracy:	10	Quadrangle:	READING
Elevation:	260	Data Reliability:	field checked by reporting agency
Date Record Created:	12/06/1976	Depth Data Source:	UNKNOWN
Date Record Updated:	01/09/1992		
Agency use of site:	Inventory Data Site Only		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Owner Information:

Owner:	KURTZ BROS CONC RETE	Zip Code:	Not Reported
Date of Ownership:	1955		

Casing Information:

Casing Top:	0	Casing Bottom:	60
Diameter:	8	Casing Wall Thickness:	Not Reported
Casing Material:	UNKNOWN		

Construction Information:

Construction Date:	1955	Finish:	Not Reported
Const. Data Source:	UNKNOWN	Construction Method:	CABLE TOOL
Driller:	Not Reported		

Geohydrologic Information:

Top of Interval:	Not Reported	Bottom of Interval:	Not Reported
Contributing Unit:	PRIMARY	Lithology:	DOLOMITE
Formation Code:	370CMBR		

Aquifer Test Information:

Discharge Date:	04/01/1971	Discharge Type:	PUMPED
Data Source:	Not Reported		
Measurement Method:	Not Reported		
Discharge:	94	SWL:	23.00
WL Data Source:	USGS OR PAGES		
WL Measurement Method:	STEEL TAPE		
Production WL:	Not Reported	Drawdown:	Not Reported
Spec. Cap.:	Not Reported	Test Length:	Not Reported
Status during measurement:	Not Reported		

Site Use Information:

Date of Use:	Not Reported	Note:	Not Reported
Site Use:	WITHDRAWAL		

Water Use Information:

Use Date:	Not Reported	Use:	INDUSTRIAL
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Water Quality Information:

Date of Measurement:	04/01/1971	Formation Sampled:	370CMBR
Code:	00900	Value:	240
Date of Measurement:	04/01/1971	Formation Sampled:	370CMBR
Code:	00095	Value:	650
Date of Measurement:	04/01/1971	Formation Sampled:	370CMBR
Code:	00400	Value:	7.1

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

27
NE
1/4 - 1/2 Mile
Lower

FED USGS USGS0896598

Agency:	USGS	Site ID:	401934075560601
Site Name:	BE SP9		
Dec. Latitude:	40.3262		
Dec. Longitude:	-75.93465		
Coord Sys:	NAD83		
State:	PA		
County:	Berks County		
Altitude:	198		
Hydrologic code:	02040203		
Topographic:	Valley flat		
Site Type:	Spring		
Const Date:	Not Reported	Inven Date:	1965
Well Type:	Spring		
Primary Aquifer:	374BSPG		
Aquifer type:	Not Reported	Well depth:	Not Reported
Hole depth:	Not Reported	Source:	Not Reported
Project no:	Not Reported		

G28
SSW
1/2 - 1 Mile
Lower

PA WELLS DPA00016231

Site ID:	401852075564101	Type of Site:	well
Local well #:	456	Date Drilled:	01/01/1954
Well Depth:	278	Longitude:	0755641
Latitude:	401852	Hydrologic Unit:	02040203
Lat/Long Accuracy:	ACCURATE TO +1 SECOND	Municipality:	READING
County:	BERKS	Topography:	VALLEY FLAT
Formation:	374BSPG	Elevation Method:	interpolated from topographic map
Elevation Accuracy:	10	Quadrangle:	READING
Elevation:	240	Data Reliability:	field checked by reporting agency
Date Record Created:	12/06/1976	Depth Data Source:	UNKNOWN
Date Record Updated:	06/01/1990		
Agency use of site:	Inventory Data Site Only		

Owner Information:

Owner:	CITY OF READING	Zip Code:	Not Reported
Date of Ownership:	1954		

Casing Information:

Casing Top:	0	Casing Bottom:	40
Diameter:	5.6	Casing Wall Thickness:	Not Reported
Casing Material:	UNKNOWN		

Construction Information:

Construction Date:	1954	Finish:	Not Reported
Const. Data Source:	UNKNOWN	Construction Method:	CABLE TOOL
Driller:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Geohydrologic Information:

Top of Interval:	Not Reported	Bottom of Interval:	Not Reported
Contributing Unit:	PRIMARY	Lithology:	LIMESTONE
Formation Code:	374BSPG		

Hole Information:

Top of the Hole:	Not Reported	Bottom of the Hole:	278
Diameter:	Not Reported		

Aquifer Test Information:

Discharge Date:	04/01/1971	Discharge Type:	PUMPED
Data Source:	Not Reported		
Measurement Method:	Not Reported		
Discharge:	40	SWL:	4.00
WL Data Source:	USGS OR PAGES		
WL Measurement Method:	STEEL TAPE		
Production WL:	9	Drawdown:	5
Spec. Cap.:	8	Test Length:	Not Reported
Status during measurement:	Not Reported		

Site Use Information:

Date of Use:	Not Reported	Note:	Not Reported
Site Use:	UNUSED		

Water Use Information:

Use Date:	Not Reported	Use:	UNUSED
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G29
SSW
1/2 - 1 Mile
Lower

FED USGS USGS0896642

Agency:	USGS	Site ID:	401852075564101
Site Name:	BE 456		
Dec. Latitude:	40.31454		
Dec. Longitude:	-75.94438		
Coord Sys:	NAD83		
State:	PA		
County:	Berks County		
Altitude:	240		
Hydrologic code:	02040203		
Topographic:	Valley flat		
Site Type:	Ground-water other than Spring		
Const Date:	19540101	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	374BSPG		
Aquifer type:	Not Reported	Well depth:	278
Hole depth:	278	Source:	Not Reported
Project no:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

H30
NE
1/2 - 1 Mile
Lower

FED USGS USGS0896527

Agency:	USGS	Site ID:	401938075560401
Site Name:	BE 1559		
Dec. Latitude:	40.32731		
Dec. Longitude:	-75.9341		
Coord Sys:	NAD83		
State:	PA		
County:	Berks County		
Altitude:	195		
Hydrologic code:	02040203		
Topographic:	Valley flat		
Site Type:	Ground-water other than Spring		
Const Date:	1994	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	374BSPG		
Aquifer type:	Not Reported	Well depth:	400
Hole depth:	Not Reported	Source:	O
Project no:	Not Reported		

H31
ENE
1/2 - 1 Mile
Lower

FED USGS USGS0896593

Agency:	USGS	Site ID:	401936075560001
Site Name:	BE 69		
Dec. Latitude:	40.32676		
Dec. Longitude:	-75.93299		
Coord Sys:	NAD83		
State:	PA		
County:	Berks County		
Altitude:	200		
Hydrologic code:	02040203		
Topographic:	Valley flat		
Site Type:	Ground-water other than Spring		
Const Date:	Not Reported	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	374BSPG		
Aquifer type:	Not Reported	Well depth:	400
Hole depth:	400	Source:	Not Reported
Project no:	Not Reported		

H32
ENE
1/2 - 1 Mile
Lower

PA WELLS DPA00016619

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Site ID:	401936075560001	Type of Site:	well
Local well #:	69	Date Drilled:	Not Reported
Well Depth:	400	Longitude:	0755600
Latitude:	401936	Hydrologic Unit:	02040203
Lat/Long Accuracy:	ACCURATE TO +5 SECONDS	Municipality:	READING
County:	BERKS	Topography:	VALLEY FLAT
Formation:	374BSPG	Elevation Method:	interpolated from topographic map
Elevation Accuracy:	10	Quadrangle:	READING
Elevation:	200	Data Reliability:	field checked by reporting agency
Date Record Created:	12/06/1976	Depth Data Source:	UNKNOWN
Date Record Updated:	06/01/1990		
Agency use of site:	Inventory Data Site Only		

Owner Information:

Owner:	HOPPER PAPER CO	Zip Code:	Not Reported
Date of Ownership:	1971		

Construction Information:

Construction Date:	Not Reported	Finish:	Not Reported
Const. Data Source:	UNKNOWN	Construction Method:	CABLE TOOL
Driller:	Not Reported		

Geohydrologic Information:

Top of Interval:	Not Reported	Bottom of Interval:	Not Reported
Contributing Unit:	PRIMARY	Lithology:	LIMESTONE
Formation Code:	374BSPG		

Hole Information:

Top of the Hole:	Not Reported	Bottom of the Hole:	400
Diameter:	Not Reported		

Aquifer Test Information:

Discharge Date:	Not Reported	Discharge Type:	PUMPED
Data Source:	Not Reported		
Measurement Method:	Not Reported	SWL:	Not Reported
Discharge:	60		
WL Data Source:	Not Reported	Drawdown:	Not Reported
WL Measurement Method:	Not Reported	Test Length:	Not Reported
Production WL:	Not Reported		
Spec. Cap.:	Not Reported		
Status during measurement:	Not Reported		

Site Use Information:

Date of Use:	Not Reported	Note:	Not Reported
Site Use:	DESTROYED		

Water Use Information:

Use Date:	Not Reported	Use:	UNUSED
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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

H33
NE
1/2 - 1 Mile
Lower

PA WELLS DPA00016650

Site ID:	401940075560301	Type of Site:	well
Local well #:	68	Date Drilled:	Not Reported
Well Depth:	600	Longitude:	0755603
Latitude:	401940	Hydrologic Unit:	02040203
Lat/Long Accuracy:	ACCURATE TO +5 SECONDS	Municipality:	READING
County:	BERKS	Topography:	VALLEY FLAT
Formation:	374BSPG	Elevation Method:	interpolated from topographic map
Elevation Accuracy:	10	Quadrangle:	READING
Elevation:	200	Data Reliability:	field checked by reporting agency
Date Record Created:	12/06/1976	Depth Data Source:	UNKNOWN
Date Record Updated:	06/01/1990		
Agency use of site:	Inventory Data Site Only		

Owner Information:

Owner:	HOPPER PAPER CO	Zip Code:	Not Reported
Date of Ownership:	1971		

Casing Information:

Casing Top:	0	Casing Bottom:	Not Reported
Diameter:	6	Casing Wall Thickness:	Not Reported
Casing Material:	UNKNOWN		

Construction Information:

Construction Date:	Not Reported	Finish:	Not Reported
Const. Data Source:	UNKNOWN	Construction Method:	CABLE TOOL
Driller:	Not Reported		

Geohydrologic Information:

Top of Interval:	Not Reported	Bottom of Interval:	Not Reported
Contributing Unit:	PRIMARY	Lithology:	LIMESTONE
Formation Code:	374BSPG		

Hole Information:

Top of the Hole:	Not Reported	Bottom of the Hole:	600
Diameter:	Not Reported		

Aquifer Test Information:

Discharge Date:	Not Reported	Discharge Type:	PUMPED
Data Source:	Not Reported		
Measurement Method:	Not Reported		
Discharge:	60	SWL:	Not Reported
WL Data Source:	Not Reported		
WL Measurement Method:	Not Reported		
Production WL:	Not Reported	Drawdown:	Not Reported
Spec. Cap.:	Not Reported	Test Length:	Not Reported
Status during measurement:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Site Use Information:

Date of Use:	Not Reported	Note:	Not Reported
Site Use:	DESTROYED		

Water Use Information:

Use Date:	Not Reported	Use:	UNUSED
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H34
NE
1/2 - 1 Mile
Lower

FED USGS USGS0896521

Agency:	USGS	Site ID:	401940075560301
Site Name:	BE 68		
Dec. Latitude:	40.32787		
Dec. Longitude:	-75.93382		
Coord Sys:	NAD83		
State:	PA		
County:	Berks County		
Altitude:	200		
Hydrologic code:	02040203		
Topographic:	Valley flat		
Site Type:	Ground-water other than Spring		
Const Date:	Not Reported	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	374BSPG		
Aquifer type:	Not Reported	Well depth:	600
Hole depth:	600	Source:	Not Reported
Project no:	Not Reported		

I35
ENE
1/2 - 1 Mile
Lower

PA WELLS DPA00016607

Site ID:	401935075555801	Type of Site:	well
Local well #:	70	Date Drilled:	Not Reported
Well Depth:	200	Longitude:	0755558
Latitude:	401935	Hydrologic Unit:	02040203
Lat/Long Accuracy:	ACCURATE TO +5 SECONDS	Municipality:	READING
County:	BERKS	Topography:	VALLEY FLAT
Formation:	374BSPG	Elevation Method:	interpolated from topographic map
Elevation Accuracy:	10	Quadrangle:	READING
Elevation:	200	Data Reliability:	field checked by reporting agency
Date Record Created:	12/06/1976	Depth Data Source:	UNKNOWN
Date Record Updated:	06/01/1990		
Agency use of site:	Inventory Data Site Only		

Owner Information:

Owner:	HOPPER PAPER CO	Zip Code:	Not Reported
Date of Ownership:	1971		

Construction Information:

Construction Date:	Not Reported	Finish:	Not Reported
Const. Data Source:	UNKNOWN	Construction Method:	CABLE TOOL
Driller:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Geohydrologic Information:

Top of Interval:	Not Reported	Bottom of Interval:	Not Reported
Contributing Unit:	PRIMARY	Lithology:	LIMESTONE
Formation Code:	374BSPG		

Hole Information:

Top of the Hole:	Not Reported	Bottom of the Hole:	200
Diameter:	Not Reported		

Aquifer Test Information:

Discharge Date:	Not Reported	Discharge Type:	PUMPED
Data Source:	Not Reported		
Measurement Method:	Not Reported		
Discharge:	60	SWL:	Not Reported
WL Data Source:	Not Reported		
WL Measurement Method:	Not Reported		
Production WL:	Not Reported	Drawdown:	Not Reported
Spec. Cap.:	Not Reported	Test Length:	Not Reported
Status during measurement:	Not Reported		

Site Use Information:

Date of Use:	Not Reported	Note:	Not Reported
Site Use:	DESTROYED		

Water Use Information:

Use Date:	Not Reported	Use:	UNUSED
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**I36
ENE
1/2 - 1 Mile
Lower**

FED USGS USGS0896595

Agency:	USGS	Site ID:	401935075555801
Site Name:	BE 70		
Dec. Latitude:	40.32648		
Dec. Longitude:	-75.93243		
Coord Sys:	NAD83		
State:	PA		
County:	Berks County		
Altitude:	200		
Hydrologic code:	02040203		
Topographic:	Valley flat		
Site Type:	Ground-water other than Spring		
Const Date:	Not Reported	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	374BSPG		
Aquifer type:	Not Reported	Well depth:	200
Hole depth:	200	Source:	Not Reported
Project no:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

H37
NE
1/2 - 1 Mile
Lower

FED USGS USGS0896592

Agency:	USGS	Site ID:	401941075560201
Site Name:	BE 1558		
Dec. Latitude:	40.32815		
Dec. Longitude:	-75.93354		
Coord Sys:	NAD83		
State:	PA		
County:	Berks County		
Altitude:	201		
Hydrologic code:	02040203		
Topographic:	Valley flat		
Site Type:	Ground-water other than Spring		
Const Date:	1994	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	374BSPG		
Aquifer type:	Not Reported	Well depth:	400
Hole depth:	Not Reported	Source:	O
Project no:	Not Reported		

J38
NE
1/2 - 1 Mile
Lower

PA WELLS DPA00016678

Site ID:	401944075560401	Type of Site:	well
Local well #:	505	Date Drilled:	01/01/1946
Well Depth:	596	Longitude:	0755604
Latitude:	401944	Hydrologic Unit:	02040203
Lat/Long Accuracy:	ACCURATE TO +1 SECOND	Municipality:	READING
County:	BERKS	Topography:	VALLEY FLAT
Formation:	374BSPG	Elevation Method:	interpolated from topographic map
Elevation Accuracy:	10	Quadrangle:	READING
Elevation:	200	Data Reliability:	field checked by reporting agency
Date Record Created:	12/06/1976	Depth Data Source:	UNKNOWN
Date Record Updated:	06/01/1990		
Agency use of site:	Inventory Data Site Only		

Owner Information:

Owner:	B & J SAYLOR FOODS C	Zip Code:	Not Reported
Date of Ownership:	1946		

Casing Information:

Casing Top:	0	Casing Bottom:	22
Diameter:	6	Casing Wall Thickness:	Not Reported
Casing Material:	UNKNOWN		

Construction Information:

Construction Date:	1946	Finish:	Not Reported
Const. Data Source:	UNKNOWN	Construction Method:	CABLE TOOL
Driller:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Geohydrologic Information:

Top of Interval:	Not Reported	Bottom of Interval:	Not Reported
Contributing Unit:	PRIMARY	Lithology:	LIMESTONE
Formation Code:	374BSPG		

Hole Information:

Top of the Hole:	Not Reported	Bottom of the Hole:	596
Diameter:	Not Reported		

Aquifer Test Information:

Discharge Date:	02/01/1946	Discharge Type:	PUMPED
Data Source:	Not Reported		
Measurement Method:	Not Reported		
Discharge:	190	SWL:	8.00
WL Data Source:	USGS OR PAGS		
WL Measurement Method:	REPORTED, METHOD NOT KNOWN		
Production WL:	Not Reported	Drawdown:	Not Reported
Spec. Cap.:	Not Reported	Test Length:	24
Status during measurement:	Not Reported		

Site Use Information:

Date of Use:	Not Reported	Note:	Not Reported
Site Use:	DESTROYED		

Water Use Information:

Use Date:	Not Reported	Use:	UNUSED
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**J39
NE
1/2 - 1 Mile
Lower**

FED USGS USGS0896587

Agency:	USGS	Site ID:	401944075560401
Site Name:	BE 505		
Dec. Latitude:	40.32898		
Dec. Longitude:	-75.9341		
Coord Sys:	NAD83		
State:	PA		
County:	Berks County		
Altitude:	200		
Hydrologic code:	02040203		
Topographic:	Valley flat		
Site Type:	Ground-water other than Spring		
Const Date:	19460101	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	374BSPG		
Aquifer type:	Not Reported	Well depth:	596
Hole depth:	596	Source:	Not Reported
Project no:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

K40
NE
1/2 - 1 Mile
Lower

PA WELLS DPA00016644

Site ID:	401939075555501	Type of Site:	well
Local well #:	446	Date Drilled:	Not Reported
Well Depth:	Not Reported	Longitude:	0755555
Latitude:	401939	Hydrologic Unit:	02040203
Lat/Long Accuracy:	ACCURATE TO +1 SECOND	Municipality:	READING
County:	BERKS	Topography:	VALLEY FLAT
Formation:	374BSPG	Elevation Method:	interpolated from topographic map
Elevation Accuracy:	10	Quadrangle:	READING
Elevation:	210	Data Reliability:	field checked by reporting agency
Date Record Created:	12/06/1976	Depth Data Source:	UNKNOWN
Date Record Updated:	03/03/1990		
Agency use of site:	Inventory Data Site Only		

Owner Information:

Owner:	BERKS PACKING CO, IN	Zip Code:	Not Reported
Date of Ownership:	1940		

Casing Information:

Casing Top:	0	Casing Bottom:	Not Reported
Diameter:	6	Casing Wall Thickness:	Not Reported
Casing Material:	UNKNOWN		

Construction Information:

Construction Date:	Not Reported	Finish:	Not Reported
Const. Data Source:	UNKNOWN	Construction Method:	CABLE TOOL
Driller:	Not Reported		

Geohydrologic Information:

Top of Interval:	Not Reported	Bottom of Interval:	Not Reported
Contributing Unit:	PRIMARY	Lithology:	LIMESTONE
Formation Code:	374BSPG		

Site Use Information:

Date of Use:	Not Reported	Note:	Not Reported
Site Use:	UNUSED		

Water Use Information:

Use Date:	Not Reported	Use:	UNUSED
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K41
NE
1/2 - 1 Mile
Lower

FED USGS USGS0896524

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Agency:	USGS	Site ID:	401939075555501
Site Name:	BE 446		
Dec. Latitude:	40.32759		
Dec. Longitude:	-75.9316		
Coord Sys:	NAD83		
State:	PA		
County:	Berks County		
Altitude:	210		
Hydrologic code:	02040203		
Topographic:	Valley flat		
Site Type:	Ground-water other than Spring		
Const Date:	Not Reported	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	374BSPG		
Aquifer type:	Not Reported	Well depth:	Not Reported
Hole depth:	Not Reported	Source:	Not Reported
Project no:	Not Reported		

L42
NE
1/2 - 1 Mile
Lower

PA WELLS DPA00016672

Site ID:	401943075555501	Type of Site:	well
Local well #:	503	Date Drilled:	01/01/1941
Well Depth:	387	Longitude:	0755555
Latitude:	401943	Hydrologic Unit:	02040203
Lat/Long Accuracy:	ACCURATE TO +1 SECOND	Municipality:	READING
County:	BERKS	Topography:	VALLEY FLAT
Formation:	374BSPG	Elevation Method:	interpolated from topographic map
Elevation Accuracy:	10	Quadrangle:	READING
Elevation:	210	Data Reliability:	field checked by reporting agency
Date Record Created:	12/06/1976	Depth Data Source:	UNKNOWN
Date Record Updated:	06/01/1990		
Agency use of site:	Inventory Data Site Only		

Owner Information:

Owner:	GRAFF BROS TRADING C		
Date of Ownership:	1941	Zip Code:	Not Reported

Casing Information:

Casing Top:	0	Casing Bottom:	33.5
Diameter:	6	Casing Wall Thickness:	Not Reported
Casing Material:	UNKNOWN		

Construction Information:

Construction Date:	1941	Finish:	Not Reported
Const. Data Source:	UNKNOWN	Construction Method:	CABLE TOOL
Driller:	Not Reported		

Geohydrologic Information:

Top of Interval:	Not Reported	Bottom of Interval:	Not Reported
Contributing Unit:	PRIMARY	Lithology:	LIMESTONE
Formation Code:	374BSPG		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Hole Information:

Top of the Hole:	Not Reported	Bottom of the Hole:	387
Diameter:	Not Reported		

Aquifer Test Information:

Discharge Date:	04/01/1941	Discharge Type:	PUMPED
Data Source:	Not Reported		
Measurement Method:	Not Reported		
Discharge:	70	SWL:	20.00
WL Data Source:	USGS OR PAGS		
WL Measurement Method:	REPORTED, METHOD NOT KNOWN		
Production WL:	161	Drawdown:	141
Spec. Cap.:	0.5	Test Length:	Not Reported
Status during measurement:	Not Reported		

Site Use Information:

Date of Use:	Not Reported	Note:	Not Reported
Site Use:	UNUSED		

Water Use Information:

Use Date:	Not Reported	Use:	UNUSED
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L43
NE
1/2 - 1 Mile
Lower

FED USGS **USGS0896590**

Agency:	USGS	Site ID:	401943075555501
Site Name:	BE 503		
Dec. Latitude:	40.3287		
Dec. Longitude:	-75.9316		
Coord Sys:	NAD83		
State:	PA		
County:	Berks County		
Altitude:	210		
Hydrologic code:	02040203		
Topographic:	Valley flat		
Site Type:	Ground-water other than Spring		
Const Date:	19410101	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	374BSPG		
Aquifer type:	Not Reported	Well depth:	387
Hole depth:	387	Source:	Not Reported
Project no:	Not Reported		

M44
NE
1/2 - 1 Mile
Lower

PA WELLS **DPA00016792**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Site ID:	401956075560101	Type of Site:	well
Local well #:	437	Date Drilled:	01/01/1925
Well Depth:	175	Longitude:	0755601
Latitude:	401956	Hydrologic Unit:	02040203
Lat/Long Accuracy:	ACCURATE TO +1 SECOND	Municipality:	READING
County:	BERKS	Topography:	VALLEY FLAT
Formation:	371MLBC	Elevation Method:	interpolated from topographic map
Elevation Accuracy:	10	Quadrangle:	READING
Elevation:	200	Data Reliability:	field checked by reporting agency
Date Record Created:	12/06/1976	Depth Data Source:	UNKNOWN
Date Record Updated:	06/01/1990		
Agency use of site:	Inventory Data Site Only		

Owner Information:

Owner:	CHESTNUT OPERAT ING	Zip Code:	Not Reported
Date of Ownership:	1925		

Casing Information:

Casing Top:	0	Casing Bottom:	Not Reported
Diameter:	5.6	Casing Wall Thickness:	Not Reported
Casing Material:	UNKNOWN		

Construction Information:

Construction Date:	1925	Finish:	Not Reported
Const. Data Source:	UNKNOWN	Construction Method:	CABLE TOOL
Driller:	Not Reported		

Geohydrologic Information:

Top of Interval:	Not Reported	Bottom of Interval:	Not Reported
Contributing Unit:	PRIMARY	Lithology:	LIMESTONE
Formation Code:	371MLBC		

Hole Information:

Top of the Hole:	Not Reported	Bottom of the Hole:	175
Diameter:	Not Reported		

Aquifer Test Information:

Discharge Date:	07/01/1971	Discharge Type:	PUMPED
Data Source:	Not Reported		
Measurement Method:	Not Reported		
Discharge:	150	SWL:	22.00
WL Data Source:	USGS OR PAGS		
WL Measurement Method:	STEEL TAPE		
Production WL:	37	Drawdown:	15
Spec. Cap.:	10	Test Length:	Not Reported
Status during measurement:	Not Reported		

Site Use Information:

Date of Use:	Not Reported	Note:	Not Reported
Site Use:	WITHDRAWAL		

Water Use Information:

Use Date:	Not Reported	Use:	INDUSTRIAL
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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

M45
NE
1/2 - 1 Mile
Lower

FED USGS USGS0896510

Agency:	USGS	Site ID:	401956075560101
Site Name:	BE 437		
Dec. Latitude:	40.33232		
Dec. Longitude:	-75.93326		
Coord Sys:	NAD83		
State:	PA		
County:	Berks County		
Altitude:	200		
Hydrologic code:	02040203		
Topographic:	Valley flat		
Site Type:	Ground-water other than Spring		
Const Date:	19250101	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	371MLBC		
Aquifer type:	Not Reported	Well depth:	175
Hole depth:	175	Source:	Not Reported
Project no:	Not Reported		

M46
NNE
1/2 - 1 Mile
Lower

FED USGS USGS0896506

Agency:	USGS	Site ID:	401958075560201
Site Name:	BE 436		
Dec. Latitude:	40.33287		
Dec. Longitude:	-75.93354		
Coord Sys:	NAD83		
State:	PA		
County:	Berks County		
Altitude:	200		
Hydrologic code:	02040203		
Topographic:	Valley flat		
Site Type:	Ground-water other than Spring		
Const Date:	19250101	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	371MLBC		
Aquifer type:	Not Reported	Well depth:	175
Hole depth:	175	Source:	Not Reported
Project no:	Not Reported		

M47
NNE
1/2 - 1 Mile
Lower

PA WELLS DPA00016804

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Site ID:	401958075560201	Type of Site:	well
Local well #:	436	Date Drilled:	01/01/1925
Well Depth:	175	Longitude:	0755602
Latitude:	401958	Hydrologic Unit:	02040203
Lat/Long Accuracy:	ACCURATE TO +1 SECOND	Municipality:	READING
County:	BERKS	Topography:	VALLEY FLAT
Formation:	371MLBC	Elevation Method:	interpolated from topographic map
Elevation Accuracy:	10	Quadrangle:	READING
Elevation:	200	Data Reliability:	field checked by reporting agency
Date Record Created:	12/06/1976	Depth Data Source:	UNKNOWN
Date Record Updated:	06/01/1990		
Agency use of site:	Inventory Data Site Only		

Owner Information:

Owner:	CHESTNUT OPERATING C		
Date of Ownership:	1925	Zip Code:	Not Reported

Casing Information:

Casing Top:	0	Casing Bottom:	Not Reported
Diameter:	5.6	Casing Wall Thickness:	Not Reported
Casing Material:	UNKNOWN		

Construction Information:

Construction Date:	1925	Finish:	Not Reported
Const. Data Source:	UNKNOWN	Construction Method:	CABLE TOOL
Driller:	Not Reported		

Geohydrologic Information:

Top of Interval:	Not Reported	Bottom of Interval:	Not Reported
Contributing Unit:	PRIMARY	Lithology:	LIMESTONE
Formation Code:	371MLBC		

Hole Information:

Top of the Hole:	Not Reported	Bottom of the Hole:	175
Diameter:	Not Reported		

Pump Intake Information:

Pump Intake:	120
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Site Use Information:

Date of Use:	Not Reported	Note:	Not Reported
Site Use:	WITHDRAWAL		

Water Use Information:

Use Date:	Not Reported	Use:	INDUSTRIAL
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N48
SSW
1/2 - 1 Mile
Lower

FED USGS USGS0896653

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Agency:	USGS	Site ID:	401840075570501
Site Name:	BE 147		
Dec. Latitude:	40.3112		
Dec. Longitude:	-75.95104		
Coord Sys:	NAD83		
State:	PA		
County:	Berks County		
Altitude:	280		
Hydrologic code:	02040203		
Topographic:	Valley flat		
Site Type:	Ground-water other than Spring		
Const Date:	19530101	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	374BSPG		
Aquifer type:	Not Reported	Well depth:	67
Hole depth:	67	Source:	Not Reported
Project no:	Not Reported		

**N49
SSW
1/2 - 1 Mile
Lower**

PA WELLS DPA00016120

Site ID:	401840075570501	Type of Site:	well
Local well #:	147	Date Drilled:	01/01/1953
Well Depth:	67	Longitude:	0755705
Latitude:	401840	Hydrologic Unit:	02040203
Lat/Long Accuracy:	ACCURATE TO +5 SECONDS	Municipality:	READING
County:	BERKS	Topography:	VALLEY FLAT
Formation:	374BSPG	Elevation Method:	interpolated from topographic map
Elevation Accuracy:	20	Quadrangle:	READING
Elevation:	280	Data Reliability:	field checked by reporting agency
Date Record Created:	12/06/1976	Depth Data Source:	UNKNOWN
Date Record Updated:	06/01/1990		
Agency use of site:	Inventory Data Site Only		

Owner Information:

Owner:	VARRICHONE, ANTHONY		
Date of Ownership:	1953	Zip Code:	Not Reported

Casing Information:

Casing Top:	0	Casing Bottom:	50
Diameter:	6	Casing Wall Thickness:	Not Reported
Casing Material:	UNKNOWN		

Construction Information:

Construction Date:	1953	Finish:	Not Reported
Const. Data Source:	UNKNOWN	Construction Method:	CABLE TOOL
Driller:	Not Reported		

Geohydrologic Information:

Top of Interval:	Not Reported	Bottom of Interval:	Not Reported
Contributing Unit:	PRIMARY	Lithology:	LIMESTONE
Formation Code:	374BSPG		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Hole Information:

Top of the Hole:	Not Reported	Bottom of the Hole:	67
Diameter:	Not Reported		

Aquifer Test Information:

Discharge Date:	05/01/1953	Discharge Type:	PUMPED
Data Source:	Not Reported		
Measurement Method:	Not Reported		
Discharge:	15	SWL:	35.00
WL Data Source:	UNKNOWN		
WL Measurement Method:	UNKNOWN		
Production WL:	36	Drawdown:	1
Spec. Cap.:	15	Test Length:	Not Reported
Status during measurement:	Not Reported		

Site Use Information:

Date of Use:	Not Reported	Note:	Not Reported
Site Use:	UNUSED		

Water Use Information:

Use Date:	Not Reported	Use:	UNUSED
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O50
ESE
1/2 - 1 Mile
Lower

PA WELLS DPA00016232

Site ID:	401852075553901	Type of Site:	well
Local well #:	439	Date Drilled:	Not Reported
Well Depth:	62	Longitude:	0755539
Latitude:	401852	Hydrologic Unit:	02040203
Lat/Long Accuracy:	ACCURATE TO +1 SECOND	Municipality:	READING
County:	BERKS	Topography:	VALLEY FLAT
Formation:	370CMBR	Elevation Method:	interpolated from topographic map
Elevation Accuracy:	10	Quadrangle:	READING
Elevation:	250	Data Reliability:	field checked by reporting agency
Date Record Created:	12/06/1976	Depth Data Source:	UNKNOWN
Date Record Updated:	01/09/1992		
Agency use of site:	Inventory Data Site Only		

Owner Information:

Owner:	PRIZER-PAINTER STOVE		
Date of Ownership:	1971	Zip Code:	Not Reported

Casing Information:

Casing Top:	0	Casing Bottom:	Not Reported
Diameter:	6	Casing Wall Thickness:	Not Reported
Casing Material:	UNKNOWN		

Construction Information:

Construction Date:	Not Reported	Finish:	Not Reported
Const. Data Source:	UNKNOWN	Construction Method:	CABLE TOOL
Driller:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Geohydrologic Information:

Top of Interval:	Not Reported	Bottom of Interval:	Not Reported
Contributing Unit:	PRIMARY	Lithology:	DOLOMITE
Formation Code:	370CMBR		

Aquifer Test Information:

Discharge Date:	04/01/1971	Discharge Type:	Not Reported
Data Source:	Not Reported		
Measurement Method:	Not Reported		
Discharge:	Not Reported	SWL:	41.00
WL Data Source:	USGS OR PAGS		
WL Measurement Method:	STEEL TAPE		
Production WL:	Not Reported	Drawdown:	Not Reported
Spec. Cap.:	Not Reported	Test Length:	Not Reported
Status during measurement:	1		

Site Use Information:

Date of Use:	Not Reported	Note:	Not Reported
Site Use:	UNUSED		

Water Use Information:

Use Date:	Not Reported	Use:	UNUSED
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O51
ESE
1/2 - 1 Mile
Lower

FED USGS USGS0896643

Agency:	USGS	Site ID:	401852075553901
Site Name:	BE 439		
Dec. Latitude:	40.31454		
Dec. Longitude:	-75.92715		
Coord Sys:	NAD83		
State:	PA		
County:	Berks County		
Altitude:	250		
Hydrologic code:	02040203		
Topographic:	Valley flat		
Site Type:	Ground-water other than Spring		
Const Date:	Not Reported	Inven Date:	Not Reported
Well Type:	Single well, other than collector or Ranney type		
Primary Aquifer:	370CMBR		
Aquifer type:	Not Reported	Well depth:	62
Hole depth:	Not Reported	Source:	Not Reported
Project no:	Not Reported		

52
East
1/2 - 1 Mile
Lower

PA WELLS DPA00016551

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Site ID:	401928075552601	Type of Site:	well
Local well #:	1527	Date Drilled:	1993
Well Depth:	268	Longitude:	0755526
Latitude:	401928	Hydrologic Unit:	02040203
Lat/Long Accuracy:	ACCURATE TO +5 SECONDS	Municipality:	READING
County:	BERKS	Topography:	VALLEY FLAT
Formation:	370CMBR	Elevation Method:	interpolated from topographic map
Elevation Accuracy:	10	Quadrangle:	READING
Elevation:	210	Data Reliability:	not fld checked, rptng agency considers it ok
Date Record Created:	11/05/1993	Depth Data Source:	PRIVATE/UNIV GEOLOGIST
Date Record Updated:	11/05/1993		
Agency use of site:	Inventory Data Site Only		

Owner Information:

Owner:	UNITED CORRSTACK INC		
Date of Ownership:	06/17/1993	Zip Code:	Not Reported

Other Owner Identification Information:

Other Identifier:	1	ID Assigner:	OWNER PA
Other Identifier:	D-93- 40	ID Assigner:	DRBC

Casing Information:

Casing Top:	0	Casing Bottom:	179
Diameter:	Not Reported	Casing Wall Thickness:	Not Reported
Casing Material:	UNKNOWN		

Construction Information:

Construction Date:	1993	Finish:	Not Reported
Const. Data Source:	UNKNOWN	Construction Method:	AIR ROTARY
Driller:	Not Reported		

Geohydrologic Information:

Top of Interval:	Not Reported	Bottom of Interval:	Not Reported
Contributing Unit:	PRIMARY	Lithology:	DOLOMITE
Formation Code:	370CMBR		

Site Use Information:

Date of Use:	Not Reported	Note:	Not Reported
Site Use:	WITHDRAWAL		

Water Use Information:

Use Date:	Not Reported	Use:	INDUSTRIAL
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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

State Database: PA Radon

Test Result Statistics

Zip	Total Sites	Min pCi/L	Max pCi/L	Avg pCi/L
19611	86	.2	51.4	5.7

EPA Region 3 Statistical Summary Readings for Zip Code: 19611

Number of sites tested: 113.

Maximum Radon Level: 76.2 pCi/L.

Minimum Radon Level: 0.2 pCi/L.

pCi/L <4	pCi/L 4-10	pCi/L 10-20	pCi/L 20-50	pCi/L 50-100	pCi/L >100
59 (52.21%)	31 (27.43%)	14 (12.39%)	6 (5.31%)	3 (2.65%)	0 (0.00%)

Federal EPA Radon Zone for BERKS County: 1

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002. 7.5-Minute DEMs correspond to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps.

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 1999 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002 from the U.S. Fish and Wildlife Service.

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the national Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STATE RECORDS

Pennsylvania Public Water Supply Wells

Source: Pennsylvania Department of Environmental Resources Bureau of Water Supply
Telephone: 717-787-5017

Pennsylvania Groundwater Information System

Source: Department of Conservation and Natural Resources
Telephone: 717-783-7258

RADON

State Database: PA Radon

Source: Department of Environmental Protection
Telephone: 717-783-3594
Radon Test Results Statistics by Zip Code

Area Radon Information

Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones

Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

EPA Region 3 Statistical Summary Readings

Source: Region 3 EPA
Telephone: 215-814-2082
Radon readings for Delaware, D.C., Maryland, Pennsylvania, Virginia and West Virginia.

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration



The EDR-City Directory
Abstract

**Baldwin Hardware Manufacturing
841 Wyomissing Boulevard
Reading, PA 19603**

July 09, 2003

Inquiry Number: 1006941-8

***The Source
For Environmental
Risk Management
Data***

3530 Post Road
Southport, Connecticut 06490

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802

Environmental Data Resources, Inc.

City Directory Abstract

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist professionals in evaluating potential liability on a target property resulting from past activities. ASTM E 1527-00, Section 7.3 on Historical Use Information, identifies the prior use requirements for a Phase I environmental site assessment. The ASTM standard requires a review of *reasonably ascertainable standard historical sources*. *Reasonably ascertainable means information that is publicly available, obtainable from a source with reasonable time and cost constraints, and practically reviewable.*

To meet the prior use requirements of ASTM E 1527-00, Section 7.3.4, the following *standard historical sources* may be used: aerial photographs, fire insurance maps, property tax files, land title records (although these cannot be the sole historical source consulted), topographic maps, city directories, building department records, or zoning/land use records. ASTM E 1527-00 requires *"All obvious uses of the property shall be identified from the present, back to the property's obvious first developed use, or back to 1940, whichever is earlier. This task requires reviewing only as many of the standard historical sources as are necessary, and that are reasonably ascertainable and likely to be useful."* (ASTM E 1527-00, Section 7.3.4, page 12.)

EDR's City Directory Abstract includes a search and abstract of available city directory data.

City Directories

City directories have been published for cities and towns across the U.S. since the 1700s. Originally a list of residents, the city directory developed into a sophisticated tool for locating individuals and businesses in a particular urban or suburban area. Twentieth century directories are generally divided into three sections: a business index, a list of resident names and addresses, and a street index. With each address, the directory lists the name of the resident or, if a business is operated from this address, the name and type of business (if unclear from the name). While city directory coverage is comprehensive for major cities, it may be spotty for rural areas and small towns. ASTM E 1527-00 specifies that a *"review of city directories (standard historical sources) at less than approximately five year intervals is not required by this practice."* (ASTM E 1527-00, Section 7.3.4, page 12.)

Please call EDR Nationwide Customer Service at
1-800-352-0050 (8am-8pm EST)
with questions or comments about your report.
Thank you for your business!

Disclaimer

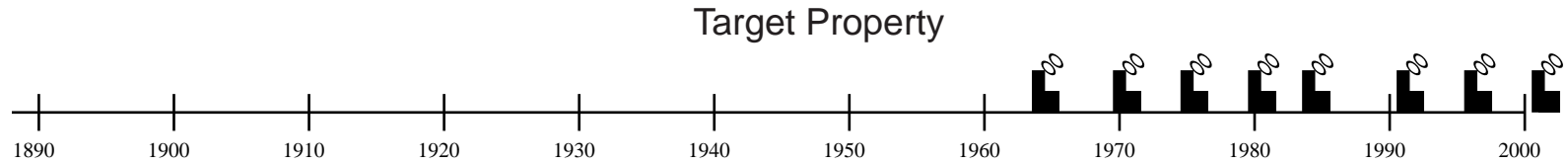
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Prior Use Report® Timeline



Legend:

 = Historical Topographic Map (HT)

 = National Wetland Inventory Map (WT) *

Superscript number corresponds to graph ID in text


**Displayed on timeline when aerial photos, flood prone, FEMA, wetland maps, or Aerial Research Summary are purchased.*

 = Flood Prone/FEMA Maps (FP/FR) *

 = Aerial Photos Included (P) *

 = Aerial Photos Available *

 = Residential (R)

 = Commercial or Industrial (C)

Target Property: Baldwin Hardware Manufacturing
Address: 841 Wyomissing Boulevard
City/State/Zip: Reading, PA 19603

Customer: Loureiro Engineering Assoc. PC
Contact: David N. Scotti
Inquiry #: 1006941-8
Date: 7/9/2003

4. SUMMARY

- ***City Directories:***

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1954 through 2002. (These years are not necessarily inclusive.) A summary of the information obtained is provided in the text of this report.

Date EDR Searched Historical Sources:
City Directories Jul 09, 2003

Target Property:
841 Wyomissing Boulevard
Reading, PA 19603

<u>PUR ID</u>			<u>Source</u>
<u>Year</u>	<u>Uses</u>		
-- 1954	Address not Listed in Research Source		Polk City Directory
-- 1958	Address not Listed in Research Source		Polk City Directory
-- 1965	Baldwin Hardware Mfg Corp Ewarts-Baldwin Forgings Co		Polk City Directory
-- 1971	Baldwin Hardware Mfg Corp		Polk City Directory
-- 1976	Baldwin Hardware Mfg Corp		Polk City Directory
-- 1981	Baldwin Hardware Mfg Corp		Polk City Directory
-- 1985	Baldwin Hardware Mfg Corp (Div Masco Corp)		Polk City Directory
-- 1992	Baldwin Hardware Corp (Div Masco Corp)		Polk City Directory
-- 1997	Baldwin Brass Masco Retail Svcs		Polk City Directory
-- 2002	Baldwin Hardware Corp		Polk City Directory

Adjoining Properties

SURROUNDING
Multiple Addresses
Reading, PA 19603

<u>PUR ID</u>			<u>Source</u>
<u>Year</u>	<u>Uses</u>		
1954	Address not Listed in Research Source		Polk City Directory
1958	Address not Listed in Research Source		Polk City Directory
1965	<u>**WYOMISSING BLVD**</u> Lester Schweitzer Svc Station (815) Vacant (825) Address not listed in research source (850) Weis Market (901) Holy Name High School (955) William Dzurek Svc Station (958)		Polk City Directory

PUR ID**Year Uses****Source**

1965 (continued)

-No other addresses within range

1971 ****WYOMISSING BLVD****

Vacant (815)

Baldwin Hardware Mfg Corp (Shipping Dept) (825)

Address not listed in research source (850)

Weis Market (901)

Holy Name High School (955)

-No other addresses within range

Polk City Directory

1976 ****WYOMISSING BLVD****

Baldwin Hardware Mfg Corp (Shipping Dept) (825)

Address not listed in research source (850)

Penn Dept Of Public Welfare-Berks County Board Of Asst (901)

Holy Name High School (955)

-No other addresses within range

Polk City Directory

1981 ****WYOMISSING BLVD****

Baldwin Hardware Mfg Corp (Shipping Dept) (825)

Address not listed in research source (850)

Penn Dept Of Public Welfare-Berks County Board Of Asst (901)

Holy Name High School (955)

-No other addresses within range

Polk City Directory

1985 ****WYOMISSING BLVD****

Baldwin Hardware Mfg Corp (Shipping Dept) (825)

Address not listed in research source (850)

Baldwin Hardware (Overflow) (901)

Holy Name High School (955)

-No other addresses within range

Polk City Directory

1992 ****WYOMISSING BLVD****

McGlinn Capital Management (850)

Holy Name High School (955)

-No other addresses within range

Polk City Directory

1997 ****WYOMISSING BLVD****

Holy Name High School (955)

-No other addresses within range

Polk City Directory

2002 ****WYOMISSING BLVD****

Holy Name High School (955)

Polk City Directory

PUR ID

Year **Uses**

Source

2002 (continued)
-No other addresses within range



"Linking Technology with Tradition"

Sanborn® Map Report

Ship to: David N. Scotti

Loureiro Engineering Assoc. PC

100 Northwest Drive

Plainville, CT 06062

Order Date: 7/3/2003

Completion Date: 7/7/2003

Inquiry #: 1006941.6s

P.O. #: NA

Site Name: Baldwin Hardware Manufacturing Corporation

Address: 841 Wyomissing Boulevard

City/State: Reading, PA 19603

Customer Project: 07md304.001

1010359DJV

860-747-6181

Cross Streets:

This document reports that the largest and most complete collection of Sanborn fire insurance maps has been reviewed based on client-supplied information, and fire insurance maps depicting the target property at the specified address were not identified.

NO COVERAGE

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APPENDIX C
AERIAL PHOTOGRAPHS

APPENDIX D

HISTORIC TOPOGRAPHIC MAPS

APPENDIX E
PHOTODOCUMENTATION